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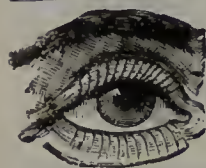
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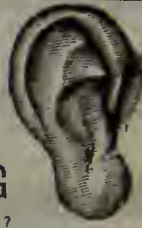
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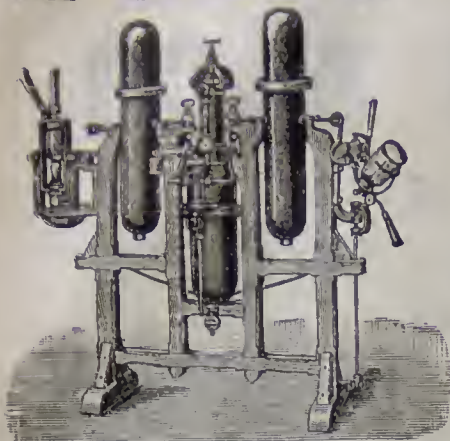
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Self-working by Chemical Action. No Skilled Labour.  
NOT LIABLE TO GET OUT OF ORDER OR NEED REPAIRS.  
*Produces the Purest Aërated Water made.*

Machines, in two sizes, at 25 guineas and 30 guineas. All complete. With the smaller a lad can make easily in ten hours twenty dozen Syphons or 100 dozen Bottles; with the larger, thirty dozen Syphons or 175 dozen bottles.

INDIA.—Machines on view at Messrs. Bertie-Smith & Co.'s, Bombay.

COUNTY LABORATORY, 30 BROWNLOW STREET, LIVERPOOL, October, 1889.

I have examined during the present year the Machines for making Aërated Waters invented by Mr. Lozé, and I have formed a very high opinion of them. No lead is found in any part which comes in contact with the water, and the process is one which produces absolutely pure Carbonic Gas. Accordingly I find that the effervescing water produced is free from every injurious metal or contamination, and has a better flavour than that produced in the ordinary way.

J. CAMPBELL BROWN, D.Sc.

CHEMICAL LABORATORY, 20 ALBERT GATE, MANCHESTER, 21st August, 1889.

GENTLEMEN.—At your request I have visited the works of Messrs. A. Lozé & Co., of Prescott Street and Tuebrook, Liverpool. I have inspected his patented Apparatus for producing Aërated Waters, and have analysed the Aërated drinks manufactured. The results of analysis quite justified the inferences which were drawn from a knowledge of the materials used. Thus, instead of using ordinary whiting (as the source of carbonic acid gas), which gives off small quantities of offensive gases when acted upon with acid, Mr. Lozé uses one of the pure soluble bicarbonates of either Potash or Soda; the use of this salt enables the apparatus to be much simplified in form, as no gas washer is required, but the carbonic acid gas may be led at once into the liquid in the Saturating Cylinders. The Aërated drinks produced are of very high quality, both as to purity and as to Aëration, and the apparatus possesses the merit of extreme simplicity and efficiency.—Faithfully yours,

G. ESTCOURT, F.I.C., F.I.

Messrs. A. LOZÉ, & CO., LIMITED.

DITTON, 10th April, 1890.

Dear Mr. Lozé,—I am pleased to inform you that I have been able to work the Machine sold to me by you without previous knowledge. With your patent Turnover I can bottle Patent Stoppers at the rate of two dozen per minute. Syphons and Corked Bottles I can fill much quicker than what you advertise the Machine to do.

The Aërated Waters produced have been sampled by a number of gentlemen, and pronounced by them to be of a most excellent quality.—Wishing you every success, I remain, yours truly,

ROBT. J. GOW, F.C.S.

## KRONENQUELLE.

THE FAMOUS NATURAL MINERAL WATER.

For  
Gout, Gravel,  
Rheumatism.



For  
Kidney and  
Bladder Diseases.

TO BE OBTAINED THROUGH ALL WHOLESALE HOUSES.

[1]

SOLE AGENTS, W. SCHACHT & CO., 26 Finsbury Pavement, LONDON, E.C.

## “MYRTLE GROVE” TOBACCO

In 1-oz., 2-oz., and 4-oz. Packets, and  $\frac{1}{4}$ ,  $\frac{1}{2}$ , 1 lb. Tins only.



TADDY & CO., 45 Minories, LONDON

ESTABLISHED 150 YEARS.



SNUFF, TOBACCO, AND SEGAR MANUFACTURERS.

Write for List of Specialties.



# SODA WATER MAKING

WITH  
LIQUEFIED CARBONIC ACID GAS.

The No. 1 "Compact" Machine (as shown) is specially designed for Chemists and Hospitals, and can be used for either Syphons or Ball-stoppered Bottles.

Producing capacity, by hand power, 60 dozens per hour.

Ditto, for steam power, 120 dozens per hour, with extra filling machine.

**PRICE £55.**

The No. 2 "Compact" Machine, made on the same principle, but smaller in its capacity.

Producing capacity, by hand, 25 dozens per hour.

Ditto, for steam, 60 dozens per hour, with extra filling machine.

**PRICE £38.**

Iron Vessel containing an average of 28lbs. by weight of Liquefied Gas ... .. } 10s. each.

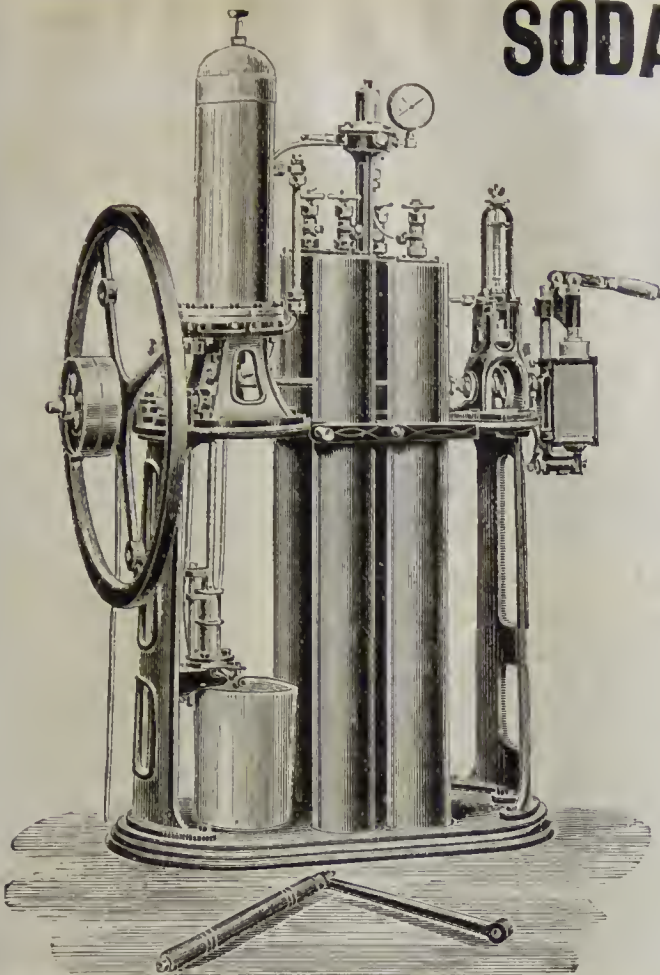
And has sufficient Gas to manufacture about 20 gross Soda Water (10 oz. Bottles), or from 3,000 to 4,000 draughts from the Counter Fountain.

A Charge of £3 is made for the Iron Vessel, but when returned, the full amount is credited.

Send for Catalogue "C," giving complete information.

Forwarded free upon application to

**BARNETT & FOSTER,**  
"Niagara Works,"  
26 Eagle Wharf Road, LONDON, N.



## ROWNTREE'S



The "MEDICAL PRESS AND CIRCULAR":—  
"Certainly this preparation is of delicate flavour . . . 1b is perfectly soluble . . . the small quantity required for the immediate production of a cup of excellent cocoa will ensure for this 'Elect Extract' a favourable reception at the hands of persons of weak digestion, and all who prefer this wholesome beverage to tea and coffee."

The "BRITISH MEDICAL JOURNAL" says:—

"Rowntree's Cocoa Extract is one of the best. Its flavour and aroma are good. Cocoa thus prepared is one of the most digestible articles of food."

**YORK, ENGLAND.**



## ROBINSON'S LIEBIG'S BEEF WINE.

Composed of Liebig's Extract of Beef, Extract of Malt, and sound Port Wine.

### REPORT ON BEEF WINES.

From the results of my Analyses of various Beef Wines I have had occasion to examine, none have equalled as regards strength, purity of ingredients, and (of no less importance) the skillful and judicious manner in which the respective ingredients have been proportioned and combined, the Liebig's Beef Wine manufactured by Mr. B. ROBINSON, of Pendleton, Manchester.

It is in every sense a reliable preparation, embodying in a pleasing and palatable form all the acknowledged medicinal and nutritive properties pertaining to Liebig's Extract of Meat, Extract of Malt, and sound Port Wine.

**WILLIAM ELBORNE, F.C.S., F.L.S.**

Lecturer on Materia Medica in the Owens College, Manchester (Victoria University).  
December 15, 1888.

Introduced 1855.

## ROBINSON'S CONCENTRATED WATERS.

Introduced 1855.

One Ounce of these Waters added to Forty Ounces of Distilled Water forms a clear Medicated Water (without filtering), similar in every respect to those prepared according to the directions of the British Pharmacopoeia, and free from all Chemical impurity. They will keep good any length of time in any climate.

Aqua Anethi, Concent., 4/1b.	Aqua Cinnam. Ver. Concent., 6/1b.	Aqua Foeniculi, Concent., 4/1b.	Aqua Pimentae, Concent., 4/1b.
" Anisi " 4/1b.	" Cassiae " 4/1b.	" Menth. Pip. " 4/1b.	" Rose " 8/6
" Camphorae " 4/1b.	" Flor. Aurant. " 8/6	" Ang. " 8/1b.	" Rose Virgin. " 10/6
" Carui " 4/1b.	" Flor. Sambuci " 8/6	" Virid. " 4/1b.	

The above are put up in Bottles of 4lb. or 1lb. and upwards, each of which has the Inventor's Protection Label over Glass.

From the LANCET, July 15, 1882:—"CONCENTRATED WATERS (Robinson's, Pendleton, Manchester).—Among the samples sent to us we find Aq. Anethi, Anisi, Cinnam. Ver., Rose, and some dozen of others. Diluted with forty parts of water they form the ordinary waters of the Pharmacopoeia. They are excellent in quality, and will be very useful, especially in country practice. (1)

Wholesale **HEARN & Co., London,** and most Provincial Wholesale Druggists. **PREPARED BY THE INVENTOR.**

**B. ROBINSON, MANUFACTURING CHEMIST, DISTILLER, AND BREWER OF BRITISH WINES, MANCHESTER.**





TO AERATED WATER MANUFACTURERS

# HAY'S

## SOLUBLE ESSENCES

REGISTERED

ARE GUARANTEED TO BE THE FINEST IN THE MARKET

ESSENCES OF GINGER, LEMON, ORANGE &c.

HOP ALE AND GINGER ALE ESSENCES.

Besides GOLD & SILVER Medals, these Essences have obtained the HIGHEST TESTIMONIALS from all the Medical Journals & from the Principal Trade Journals in this & other Countries.

W. HAY, MANUFACTURING CHEMIST BEVERLEY RD. HULL

PRICE LISTS FREE ON APPLICATION.

# CARLSBAD NATURAL MINERAL WATERS & SALTS.

Are imported in bottles, and used in the treatment of CHRONIC GASTRIC CATARRH, HYPERÆMIA of the LIVER, GALLSTONES, CHRONIC CONSTIPATION, DIABETES, RENAL CALCULI, GOUT, and DISEASES of the SPLEEN.



## NATURAL CARLSBAD SPRUDEL-SALT

In small and frequent doses it is an efficient diuretic, but as an aperient it should be taken before breakfast, in doses of from 1 to 2 teaspoonfuls, dissolved in water, preferably warm. To increase the aperient action of the Natural Carlsbad Mineral Water, a teaspoonful of the Salt, previously dissolved in a little hot water, should be added.

SOLE IMPORTERS—

[1]

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**GOODALL'S  
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SPECIALITIES.****YORKSHIRE RELISH.**

Most Delicious Sauce in the World. Bottles, 8d., 1s., and 2s. each

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The Best in the World. 1d. Packets; 8d., 1s., 2s. and 5s. Tins.

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One 8d. Tin is equal to 25 eggs. In 1d. Packets; 8d., 1s. 2s. and 5s. Tins.

**GOODALL'S CUSTARD POWDER.**

Delicious Custards without Eggs. In Boxes, 2d., 8d., and 1s. each

**GOODALL'S BLANCMANGE POWDER**

Delicious Blancmange in a Few Minutes. Boxes, 8d. and 1s. each.

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Best Tonic yet Introduced. Bottles, 8d., 1s. and 2s. each.

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Makes the Best Ginger-Beer. Packets, 3d. and 8d.

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For Painting Stoves, Grates, Iron, Tin, &amp;c. 8d. and 1s. Bottles

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A Rich and Lasting Perfume. Bottles, 1s., 2s., and 5s. each.

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For Polishing and Cleaning all Metals. Boxes, 8d., 1s. and 2s.

**GOODALL'S JELLY SQUARES.**Make a Delicious and Nutritious Jelly. In  $\frac{1}{2}$ -pint, 1-pint, and Quart boxes, 3d., 8d., and 1s. each.

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**PATENT MEDICINES**

AND

**DRUGGISTS' SUNDRIES.**

Monthly Price List of Patent Medicines, Druggists' Sundries, &amp;c., will be sent post free on application to

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CAN SAVE

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AND

**MONEY**

by selling my "Plain Label" Lines, and should remit price quoted for a sample  $\frac{1}{4}$ -gross, sent carriage paid, on first occasion; and if not satisfactory, I will also pay carriage back and return the cash.

Yours faithfully,

PETER TYRER.

**PENNY MENTHOLS**On  $\frac{1}{4}$ -gross Cards, at 5/6 and 6/6.**PENNY (TASTELESS) PILLS**6 in a box,  $\frac{1}{4}$ -gross Cards, at 4/6.**SPECIAL NEW LINE.****PENNY PILLS,**

6 PILLS IN GLASS TUBES.

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GLASS TUBES.

On  $\frac{1}{4}$ -gross Cards, at 6/6.**PENNY TOOTH TINCT.**With Wool complete. On  $\frac{1}{4}$ -gross Cards, at 5/6.**PENNY CORN SOLVENT**On  $\frac{1}{4}$ -gross Cards, at 5/6.**PENNY COURT PLASTER.**On  $\frac{1}{4}$ -gross Cards, at 4/.

For sums under £1 please remit Postal Order, not Cheque, and oblige,

**PETER TYRER,**

70 Long Lane, LONDON, S.E.



# SYPHONS & SELTZOGENES



## SODAWATER MACHINERY

AND APPLIANCES  
**BRATBY & HINCHLIFFE LTD**  
ANCOATS 146 MINORIES  
**MANCHESTER & LONDON EC**

81 ROBERTSON STREET, GLASGOW.

All our Seltzogenes are manufactured on the well-known "Fevre" System, and each one is thoroughly tested before leaving our works.



### PRICES.

SYPHONS ... 1/6 1/8 and 1/10 each.

### SELTZOGENES.

1	2	3	4	5	8 pint.
5/6	6/2	7/	8/	9/11	15/6 each.

**A WONDERFUL SUCCESS!!**

**NON-INTOXICATING BEER**

Made from MASON'S Original

## EXTRACT of HERBS

(REGISTERED.)

Composed of Yarrow, Dandelion, Comfrey, & Horehound  
ENLARGEMENT OF SIZE.

A Sixpenny Bottle makes EIGHT GALLONS of  
**HERB OR BOTANIC BEER**

A NON-INTOXICATING BEVERAGE

Full of Body and Flavour, with a Creamy Head like Bottled Ale, the most perfect substitute for Alcoholic Drinks ever discovered, for either Summer or Winter.

**BEWARE** of mean and fraudulent imitations.

**BEWARE** of others copying our title.

**MASON'S** is the original and only genuine.

**MASON'S** is a Special Compound entirely from Herbs.

NO OTHER EXTRACT MAKES BEER LIKE IT.

Sold in Bottles at 6d., 1/, & 2/ each, with directions.

## MASON'S WINE ESSENCES

Make Temperance Wines in a few minutes.

Ginger, Orange, Lemon, Raspberry, Black Currant, &c.

These are having a very large sale now, and are extensively advertised.

Sold in Bottles at 6d., 1s., and 2s. each.

Quotations on application.

Sole Inventors & Manufacturers

**NEWBALL & MASON,**

Manufacturing Chemists and Botanic Druggists, NOTTINGHAM.

# KINMOND'S

Royal Leamington  
APNEUMATIC

## TABLE WATERS

Were first supplied to H.M. the Queen in 1856,  
and to H.R.H. the Prince of Wales in 1862.

## KINMOND'S GINGER ALE,

AND ALL THEIR OTHER WATERS,  
Are UNRIVALLED for PURITY and QUALITY.

In Ordinary Bottles and Syphons.

## MANUFACTORY- LEAMINGTON.

Send for Trade List and Compare Prices.



**The British Medical Journal says:—** "Caffyn's Liquor Carnis is undoubtedly a nourishing fluid, consisting of the Uncooked Juice of Meat, or muscle-plasma, permanently preserved by the addition of a definite quantity of a carbohydrate . . . a valuable Food and Tonic for Infants and Invalids."

UNCOOKED meat has, in the London hospitals, rapidly worked its way to the front as the only trustworthy article of sick diet, and the scientific reason is very obvious. Milk, farinaceous foods, beef-tea, and broths, let them be ever so complete in their chemical constituents, need, before the body can absorb them, pass through the complicated process of digestion. IT IS NOT SO WITH RAW MEAT. It feeds by absorption—it soaks in; if its juice is injected beneath the skin of dogs it is in a few moments picked up. Beef tea, on the other hand, would produce an abscess, or simply become a hardened mass. The method hitherto employed in hospital or private practice for the administration of uncooked meat has been to SCRAPE IT WITH A KNIFE until sufficiently fine to spread on bread-and-butter, or mix with breadcrumbs. Thus given it is exceedingly repulsive to adults; and, for children, involves constant trouble and expense. Moreover, it is an incomplete food, in that it contains no fat or heat-producing properties. All these difficulties have been surmounted by the invention of Caffyn's Liquor Carnis, which consists of the SIMPLE JUICE OF UNCOOKED MEAT, obtained by hydraulic pressure, and preserved by the addition of the necessary carboniferous matter; it is much liked by children and adults. Its sweet flavour, if objectionable to adults, can easily be obviated by taking in combination with coffee, cocoa, &c. The results from the administration of Caffyn's Liquor Carnis have quite justified all that its constituents led scientific men to expect from it. Upon cases of mirasma, consumption of the bowels, and other wasting diseases, it has acted like a charm. In acute illness, of whatever nature, whether from fever or other causes the strength of the patient is diminishing, Liquor Carnis, from its completeness as a food and the rapidity of its absorption, is invaluable. In the BLOODLESSNESS OF GIRLS it may be given with a certainty of success. In typhoid and ulceration of the stomach it has done yeoman service. In short, Liquor Carnis is not a quack preparation, but a scientific food, founded upon a scientific principle, that is certain to reorganise the whole system of sick diet.



*The Court Circular* says:—"We have recently been suffering from a wave, so to speak, of beef-tea. A few years ago, there were but two or three in the market, now their name is literally and positively legion, whether they be called meat extracts, bouillons, essences, or by any fancy name connected with beef. That they have done some good is unquestionable, since we find them sold in public-houses, restaurants, and at railway-stations to those who otherwise would have no alternative but to drink beer or spirits. The melancholy part of the business, however, is the discovery that these various preparations have no medical value as foods, for they contain little or no nutrition. The process by which they are produced, instead of extracting the nutriment of the meat, leaves it behind, owing to the defect of the system of extraction, which is one of heat.


THE *Lancet* HAVING SAID:

'The desideratum of the age is not a new medicine, but a new food—a food that, while containing all constituents necessary for the support of life, contains them in a form that allows for their direct absorption'—Dr. Caffyn set to work, and after devoting years of study to the subject, and conducting a countless number of experiments, succeeded in producing by a cold process a meat juice called 'Liquor Carnis,' which is actually and positively the uncooked juice of meat combined with a certain proportion of carbohydrates, and made perfectly pleasant and palatable. It is, in short,

'THE DESIDERATUM OF THE AGE'

referred to by the *Lancet*, and is perforce, in consequence of its nutritive qualities and powers of absorption, a perfect food."

*Pharmacists willing to distribute specimen bottles and literature to Medical Men will oblige by intimating the same to us and sending List of Medicos, with Addresses.*

 Retail—Three-ounce Bottle, 2s.; Six-ounce, 3s. 6d.

[5]

# THE LIQUOR CARNIS CO., LTD.

50 HOLBORN VIADUCT. Laboratories—SMITHFIELD WORKS, LONDON, E.C.



**BARCLAY & SONS, Ltd.**

Of excellent quality—

**1-DRAM PILL BOXES, "G.P.O."**

3d. per gross (in any quantity).

**1d. OINTMENT TINS. 2s. per gross.** $\frac{1}{2}$ -oz. capacity.

1d. COLD CREAM TINS (Two Drams), Labelled, 2/- per gross.

1d. LIP SALVE TINS " " " 2/- per gross.

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ESTABLISHED UPWARDS OF A CENTURY.

This old-established and celebrated preparation for the Teeth is attractively put up in the form of Liquid, Powder, and Paste, is now being largely advertised to the public.



THE GENUINE  
**EAU DE BOTOT**  
IS THE ONLY DENTIFRICE APPROVED  
By the Academy of Medicine of Paris.

	Size	Size	Size
EAU de BOTOT	1/6, 11/9;	2/6, 20/;	5/ 32/9 doz
POWDER	1/ 8/6;	2/6, 17/	doz.
PASTE	1/ 8/6;	2/6, 17/	"

Of all Wholesale Houses.

N.B.—See each Article  
has the Signature—

SAMPLE BOXES,  
Containing  
Powder, Paste, & Liquid  
per 8/- doz.

# CHAS. SOUTHWELL & CO.

SOLE MAKERS OF THE

## EXCELSIOR TABLE JELLIES

In Packets of  
half-pint, pint, and  
quart, costing  
less than one-third  
of the ordinary  
Bottled Jellies.



BLACK CURRANT  
ORANGE  
LEMON  
CALFSFOOT  
VANILLA  
NOYEAU  
CHERRY  
STRAWBERRY  
RASPBERRY  
PINE APPLE

PRICE LIST ON APPLICATION.

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WHOLESALE AND EXPORT CONFECTIONERS,  
**DOCKHEAD, LONDON, S.E.**

**TOBACCO AND CIGARS—MIXED PARCELS.**

Every Requisite for the Smoker in One Order.

The following Manufacturers' Packet Tobaccos supplied at their List Prices, **CARRIAGE PAID**:—Wills, Cope, Bignett, Gallaher, Taddy, Ogden, Phillips, Player, Murray, Areher, Clarke, Brankston, Morris, Mitchell, Smith, Lambert & Butler, Pace, Goodwin, Duke, Kinney, Kimball, Richmond Cavendish Company, Carroll, Lorillard, &c. Havana, Mexican, Manila, Indian, and Swiss Oigars and Cheroots at Importers' Prices.

The Cigarettes of the following Firms at List Prices:—Goodwin, Allen & Ginter, Kinney, Duke, Kimball, Au Bon Fumeur, Wills, Player, Lambert & Butler, Cope, and the leading Egyptian and Turkish Houses.

**BRITISH CIGARS** from 4s. to 20s. per 100. All carefully selected and well matured. The largest and most varied stock in the United Kingdom to select from.

Irish Roll, Pigtail, Nailrod, Target, Cake, Plug, and all other hard Tobaccos; also Flakes, Shags, Virginias, Cut Cavendish, and every description of plain and fancy Cut Tobaccos of standard quality at lowest prices.

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Carriage paid on parcels from £2 upwards to any station in the United Kingdom. **SEND FOR DETAILED PRICE LISTS.**

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Cannon Street and Fore Street, BIRMINGHAM.

# OKELL'S ORIGINAL MONA BOUQUET

Retail, 1/ 1/8, &amp; 3/8; Wholesale, 7/12/ 22/8 per doz.

This much-admired Perfume (first introduced by the late Joseph Okell) may be obtained from the leading Patent Medicine Houses, Wholesale Druggists, and Druggists' Sundry Dealers.

Sole Consignee—**THOMAS WEST, 59 and 61 Chester Road, Stretford, Lancashire.**

Special Agents—**B. G. LENNON & CO., London, and Port Elizabeth Cape Town, and East London, South Africa.**

# RANDALL'S BLACK CURRANT LOZENGES

Plain Black Currant, old square 2/6	Black Currant Voice (warm
Plain Black Currant, rough oval 2/6	astringent) .. .. . 3/
Black Currant and Ipecacuanha 2/6	Black Currant Cough Lozenges* 3/6
Black Currant and Tannin .. 3/	*Ipecac. & Morph., strength as "B.P."

In Bottles, 1-lb., 2-lb., 4-lb., and 7-lb. For Exportation, in Soldered Tins, of any size. From EDWARDS, London, or SANGER & SONS; through any Wholesale House; and from the Manufacturers,

**RANDALL & SON, SOUTHAMPTON,**

Who will forward Samples by post on application.

Also Brown Cough Lozenges, 2/; 7 lbs. stamped with name free, and Musk Lozenges (Special), 2/6.

N.B.—Medical Lozenges of every kind, including those of the Pharmacopœia of the Hospital for Diseases of the Throat, London, made with Black or Red Currant.

# LOEFLUND'S MALT AND STERILIZED MILK PRODUCTS



LANCET.—"We have nothing but praise to bestow."

BRITISH MEDICAL JOURNAL.—"Pure Hordeum possesses all the properties claimed for it."

CHEMIST AND DRUGGIST.—"Pure Hordeum may be relied on to contain the highest attainable proportion of diastase."

KINDERMILCH } Infant  
ALPINE MILK RUSKS (ground) } foods.  
CREAM MILK, unsweetened, sterilized.  
OREMOR HORDEATUS, delicious substitute for Cod-liver Oil.

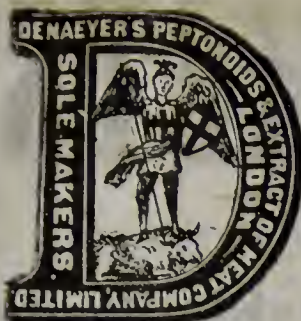
PURE HORDEUM (Malt Extract) } also  
with Cod-liver Oil, Hops, Iron, Lime  
Quinine, and Peppine.

MALT EXTRACT LOZENGES.  
MUSTARD LEAVES, best and cheapest.

Sole Agents—**ROBERT BAELZ & CO., 14-20 St. Mary Axe, E.C.**



TRADE MARK.



*THE LANCET*:—"About one-third of the whole dry matter consists of true peptone, and another third of albumose. A variety of albumen uncoagulated by heat."—July 12th, 1890.

*VIENNA POLIKLINIK*:—"Your preparations . . . have proved excellent means of nutrition, and for strengthening individuals of great weakness and poverty of blood."—Prof. SCHNITZLER, Sept. 19th, 1890.

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## LIQUID STERILISED PEPTONE OF MEAT.

Considerably more nutritive than beef, and more palatable than home-made beef-tea; elegant in appearance. No digestive function need, or can, be exercised, all having been fitted for immediate absorption. Life can be supported indefinitely upon it, and it does not olog upon the most fastidious and delicate palate. It contains all the stimulative extractives and the mineral salts in due proportion, as they exist in beef. 2s. per bottle, ready for use.

**LIQUID PEPTONATE OF IRON** (Denaeyer), 1s. 6d. per bottle, guaranteed to contain 10 per cent. of the salt in solution, equal to 330 per cent. of the metal.

**PULVIS FERRI PEPTONATIS** (Denaeyer), 4s. per ounce bottle, a beautiful reddish-grey powder, soluble in water, compatible with all alkaline or neutral medicines.

**TRUE PEPTONATE OF IRON** is the produce of our laboratory alone, and is our discovery. The salt is precipitated from its solution in presence of the acid gastric juice, redissolved and absorbed with great rapidity in the alkaline medium met with in the duodenum, so that it does not interfere with digestion, and it is not chemically altered by the juices of the alimentary canal. Should be administered before meals, and its flavour requires no disguise.

PAMPHLETS AND SAMPLES FREE TO MEDICAL MEN.

Wholesale General Agents—Edinburgh: DUNCAN, FLOCKHART & CO. Glasgow: OLD APOTHECARIES' COMPANY (Limited).

Dublin: HAMILTON, LONG & COMPANY (Limited).

**DENAAYER'S PEPTONIDS AND EXTRACT OF MEAT COMPANY (LIMITED),**  
118 BISHOPSGATE STREET WITHIN, LONDON, E.C.

# BOVRIL

The following is taken from a Clinical Lecture, given at the Hotel Dieu Hospital, by Dr. J. M. BEAUSOLIEL, Professor of Histology at the School of Medicine and Surgery:

"Undoubtedly many persons have been starved to death, through inexperienced Medical Men and Nurses placing an undue nutritious value on such preparations as Extract of Meat, home-made beef-tea &c.; whereas,

had BOVRIL been used in their stead, the patients would, in nine cases out of ten, have gained strength to battle against the disease under which they were suffering.

I have no hesitation to advise you to prescribe to your patients, to your convalescents, to those of your clients who have mental exertions, to use JOHNSTON'S BOVRIL, which, in a concentrated form, contains a substantial tonic and a palatable food.

"J. M. BEAUSOLIEL, M.D."

OFFICES:—30 FARRINGTON STREET, LONDON

## MILLAR'S BRITISH WINES.

ORANGE (suitable for Quinine), GINGER, RAISIN COWSLIP, CHERRY, &c.  
**A. MILLAR & CO., Thomas Street, DUBLIN.**

Sole Agents for London and District—H. J. BOYDANT & CO., 75 Acre Lane, Brixton, S.W.

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Barnett and Foster  
Chemicals Aerated Water  
Association,  
Ellis & Son (Kutlin)  
Frans, Joseph, Co.  
Guber Spring  
Glass and Co.  
H. W.  
Ingram and Hoyle  
Kimmond and Co.  
L. H. W.  
Schweppé, J., and Co.

**BITTO PLANK**  
[See Bitto and Exercises]  
Barnett and Foster  
Brady and Hinchliffe (Ld.)  
Everett Bros.  
Ford, A., and Co.  
Mason, A., Newton  
W. H. W., and Co.

**CAUSTIC ACID**  
Foster Bros.  
Green, E. W., and Co.  
Morris and Company (Ld.)

**APPARATUS**  
Clarke, B. (Food Warmer and Food Tray)  
Ohlsen, A.  
Shaw, J., and Co. (Scientific)  
Shaw, J., and Co. (Scientific)  
Shaw, J., and Co. (Scientific)  
Shaw, J., and Co. (Scientific)

**ARTIFICIAL EYES**  
Book, Oscar

**ACKNOWLEDGEMENTS ABROAD**  
Acad, Ed.  
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Falcon, Grimwade and Co. (Melbourne)  
Forgers and Co. (New York)  
Kempthorne Prosser & Co. (N.Z.)  
Tennon, B. G., and Co.  
Levy, Jules  
Peake, Allen and Co.  
Prosser, Taylor and Co.  
Roberts (Paris, ac.)  
Roche, Tompkins and Co. (Melbourne)  
Sharland and Co.  
Stoll, W. H., and Co.

**ALKALOIDS**  
Howard and Sons (Cyphona)  
Smith, T. and H., and Co.

**AMMONIA**  
May and Baker (Limited)  
White, A., and Co.  
Woolley, Sons and Co.

**SANDACHES**  
Bailey, W. H., and Son  
Robinson and Son  
Schntze, F. and Co.

**BAKING POWDER**  
Goodall, Backhouse & Co.

**BEEHIVES**  
Bowdler, W. H., and Co.

**BICARB. SODA**  
Brauer, Mond and Co., Ltd.  
Howard and Son  
May and Baker (Limited)

**BISMUTH, PRIND, FRANCEL**  
Heaton, Squire and Francel  
Hewlett and Sons  
Howard and Son  
May and Baker (Limited)  
Tyner, T., and Co.  
White, Alfred, and Son

**BOTTLES**  
Alroy and Collier Bottle Co. (Ld.)  
Barnett and Foster  
Barrett, R. H.  
Brady and Hinchliffe (Ld.)  
Breth's (Lim.)  
Evans, Sons and Co.  
Gibbertson, H., and Son  
Hearn, B. A., and Co.  
Johnson and Jørgensen  
Mark, J., and Co.  
Pothe, H., and Co.  
Shirley, A. W.  
Thompson, Walters, Hole and Co. (Lim.)  
Toogood, W.  
Woodland, B.

**BOOKS**  
Dr. Hargreaves, M. D.  
Lewis, H. K.  
Percival and Co.  
Squire's "Companion"

**BURNS**  
Evans, Sons and Co.  
Hart, G. B., and Son  
Moseley, David and Sons

**BUTTER OIL, &c.**  
Heaton, Squire, and Francel  
Oldfield, Pattinson and Co.  
Rylands and Hayward

**CANAL**  
Anstiff and Co. (Canal board)  
Ayton and Saunders  
Chalmers, W. R.  
Evans, Sons and Co.  
Norries, B., and Co.  
Owen, J., Jr.  
Ramsay, J. W. and Jc. Lim  
Ramsay, J. W. and Jc. Lim  
Ramsay, J. W. and Jc. Lim

**CAMPION**  
Ford, H. W. B., and Son (Ld.)  
Howard and Son  
May and Baker (Limited) (Homocoo-  
May & Baker (Ltd) (pathic)

**CASTOR OIL**  
Allen and Hanbury  
Fuerst Bros.  
Green, R. W., and Co.  
Lofden Cod Liver Oil Co.

**CAPSULES**  
[RETAILS]  
Bells and Co.  
Brooks, Peel and Co.  
Sanders, H. G., and Son

**CAPSULES**  
Denonai, J. (Medicinal)  
Duncan, Flockhart and Co.  
Evans, Sons and Co.  
Fouquier, Bon and Co.  
Hooper, B., and Co.

**OSCAR SACRAMENT**  
Duncan, Flockhart and Co.  
Evans, Sons and Co.  
Ferre and Co.  
Moore, J., and Co.

**CATALOGUE**  
Evers, Sons and Co.  
Lyn H. and Co.  
May, Roberts and Co.  
Sanger and Son  
**ORAL PREPARE**  
Levermore, Aug., and Co.  
White, A., and Son  
**SERIES OF GOLD**  
Greiff, B. W., and Co.  
Howman, L.  
**SEMI-OXIDE OF LIME**  
Government Sanitary Co.  
National Chemical Co.  
**CHEMICALS**  
Audrey, Oscar and Co.  
Bramwell, E., and Son  
Cranner, and Co. (Ld.)  
Dunham, W., and Co.  
Fletcher, Fletcher and Son  
Fuerst Brothers  
Guthrie, Backhouse and Co.  
Green, R. W., and Co.  
Hall, A. B., and Son  
Jockingsons, Treacher and Clarke  
Kewars and Son (Pharm.)  
Luhn, B.  
Levermore, Aug., and Co.  
Lothhouse and Palmer  
May and Baker (Limited)  
Morris and Callan  
Morse and Co.  
Foulenc, Frères  
Reade Bros. and Co.  
Smith, T. and H., and Co.  
Sterra, G. and G. (Parishes)  
Trommsdorff, H.  
Tyner, T., and Co.  
White, A., and Son  
Zimmermann, A. and H.



**CRIST PROTOTAS**

Evans Sons and Co.  
Hockin, Wilson and Co.  
Lynch and Co.  
Newbery, F., and Sons  
Schutts, F., and Co.  
Solport, Bros.  
The Liverpool Lint Co.  
Thompson, Walters, Hole and Co. (Limited)  
Wood, Vincent

**CHLORODYNE**

Davenport (Brown's)  
Towle, A. F., and Son

**CHLOROFORM, &c.**

Duncan, Flockhart and Co.  
Greiff, R. W., and Co.  
Macfarlan, J. F., and Son  
Mason, A. H.  
Smith, T. and H., and Co.  
Warrington Chemical Co.  
Wright, Layman and Umney  
Zimmermann, A. and M.

**CITRIC ACID**

Hassall and Co. (Phospho)

**COCAINE-HYDRO.**

Howards and Sons

**COCA WINE**

Armbricht, Nelson and Co.  
French Hygienic Soc.  
Jozau, Gabriel  
Mariani and Co.

**COCOA & COCOLES**

Cadbury Bros. Fry and Sons  
Christy and Co.  
Howntree and Co.  
Van Houten's Cocoa

**COD-LIVER OIL**

Allen and Hanburys  
Burroughs, Wellsome and Co.  
Evans, Sons and Co.  
Greiff, R. W., and Co.  
Hill, A. S., and Son  
Lofodan Cod Liver Oil Co.  
Lofodan and Balmier  
Smith, T. J.  
Southall Bros. and Barclay  
Woolley, Sons and Co.

**COFFEE**

Symington and Co. (Esence)

**COLDSIBLE TUNES**

Betts and Co.  
Brooks, Peel and Co.  
Sanders, H. G., and Son

**COMP. MEDICINES**

Allen and Hanburys  
Blyton, Astley and Co.  
Burroughs, Wellsome and Co.  
Fuerst Bros.  
Hooper, B., and Co.  
Lloyd, T. H., and Co.  
Wryles and Co.

**CONFECTIONERY**

Blyton, Astley and Co.  
Gibson, E., and Sons  
Kerfoot, T.  
Pascoal, T.  
Warrick Brothers

**CONCENT. LIQS.**

Evans, Sons and Co.  
Fletcher, Fletcher & Stevenson  
Lloyd, T. H., and Co.  
Southwell, C., and Co.

**CORN CURBS**

Seabury & Johnson (Plaster)

Thompson, M. [P. Young, H]

**COTTON WOOL**

Haynes, G., and Co. (Absorbent)  
Robinson and Sons (Absorbent)  
Sanger, J., and Sons  
Seabury and Johnson

**CRSED LINSIED**

Mumford, S. G.

**DENTIFRICES**

Bau de Botot  
Evans, Sons and Co.  
Fentiman and Co.  
Jewellery and Brown  
Lakeman, J. J. "salvine"  
Lowe, C.

Quelch, H. C.  
Stevens, P. A.

Sutton, O., and Co.  
"The Alexandra" (Ziemer)  
Thompson and Capper  
Warrick Bros.

Woods, W. (Arcea Nut)

**DRUGGISTS' SUP.**

Ayrton and Saunders  
Bailey, M., and Co.  
Barclay and Sons (Limited)  
Evans, Lesscher and Webb  
Evans, Sons and Co. (Bavaria)  
Fordham, W. B., and Sons (Lim.)  
Gilbertson, H., and Sons  
Hill, A. S., and Son  
Hockin, Wilson and Co.  
Idris and Co.  
Kay Bros. Lim.  
Lynch and Co.  
Mark, J., and Co.  
Marriot, E., and Co.  
Mason, A. Newton  
May, Roberts and Co.  
Quelch, H. O.  
Rankin, W., and Sons  
Sanger and Sons  
Schutts and Co.  
Thompson, Walters, Hole and Co. (Lim.)  
Wood, Vincent

**DRUG GRINDERS**

Je dan and Co.

**DIRECTORY**

Drysdale, J. W., and Co.

**DISINFECTANTS**

Fletcher Bros. and Co.  
Government Sanitary Co.  
Grindley and Co. (Lim.)  
Sanitron and Co. (Lim.)  
Jeyes' Fluid  
National Chemical Co.  
Sanitas Co.  
Seabury and Johnson  
Vogt, G., and Co.

**EAU DE COLOGNE**

Farina, J. M.  
Martin, Maria (Nun)

**ELASTIC HOSIERY**

Wood, V.

**ELECTRIC APPAR.**

Darton, F., and Co.  
Gent and Co.  
Lancaster, J., and Son  
Orme and Co.

**ENEMAS**

Evans, Sons and Co.  
Sanger and Son

**ENGRAVERS**

Barker, W., and Son  
Corran, J. R.  
Young, C. A., and Co.

**ESSENCES**

Ainsworth, Clayton and Jowett  
Beckert, W. Boehm, F.  
Brady and Hincinane (Ad.)  
Burgoyne, Burdidge and Co.  
Bush, Son, and Co.  
Cush, W. J., and Co.  
Gummock, J.  
Firth, H.  
Goodall, Backhouse and Co.  
Hay, W. Idris and Co.  
May and Baker (Limited)  
Millar, A., and Co.  
Newball and Mason  
Oldfield, Pattinson and Co.  
Stevenson and Howell  
Tyner, P. (Anchovies)  
Tyner, T., and Co.  
Woolley, Sons and Co.

**ESSENTIAL OILS**

Ainsworth, Clayton and Jowett  
Boehm, F.  
Bush, W. J., and Co.  
Bush, W. J., and Co.  
Clay, Dod and Co.  
Cooking & Co. (Japan Peppermint)  
Gummock, J.  
Drysedale, J. W., and Co.  
Evans, Sons and Co. [Clarke]  
Hodgkinson, Treacher and Lambert, S., and Co. (Sandal Wood)

**ETHER**

Duncan, Flockhart and Co.  
Howards and Son  
May and Baker (Limited)  
Robbins, J., and Co.  
Tyner, T., and Co.  
White, A., and Sons  
Woolley, Sons and Co.  
Wright, Layman and Umney

**EXTRACTS, FLUID**

Allen and Hanburys  
Barber, G., and Co.  
Burgoyne, Burdidge and Co.  
Dakin Brothers  
Evans, Sons and Co.  
Fletcher, Fletcher & Stevenson  
Hearon, Squire and Francis  
Hooper, B., and Co.  
Lloyd, T., Howard and Co.  
Moss and Co.  
Potter and Clarke  
Wright, Layman and Umney

**EXTRACT, MEAT**

Australian Meat Co.  
Bovril (Limited)  
Brand and Co.  
Denaeyer's Peptone and Extract of Meat Co. (Lim.)  
Liebig Co.  
Liquor Carnis Co. (Lim.)  
Mason, G., and Co. (Lim.)

**FENDING BOTTLES**

Breitts, E. and Co., Lim.  
Evans, Sons and Co.  
Hearn, E. A., and Co.  
Hockin, Wilson and Co.  
Kilner Bros.  
Marriot, E., and Co.  
May, Roberts and Co.  
Thompson, Walters, Hole and Co. (Limited)  
Toogood, W.

**FLY PAPERS**

Ford, Shapland and Co.  
Tunbridge and Wright  
Wilson, S.

**FOOD (Infants & Invalids)**

Allen and Hanburys  
Baelz, R., and Co.  
Brand and Co.  
Goodall, Backhouse and Co.  
Hearon, Squire and Francis  
Liebig Co.  
Liquor Carnis Co. (Lim.)  
Mottershead & Co. (Benziger's Food)  
Quelch, H. C. (Warmer)  
Kidge, Dr.  
Savory and Moore

**FILTERING**

Fordham, W. B., and Sons, Lim.

Silicated Carbon Filter Co.

**SINGER AID**

Hay, W. (Esence)

Mills, R. M., and Co.

**GLUE**

Deutschemann and Woronelski  
Grove Chemical Co.  
Fordham, W. B., and Sons

**GLYCERIN**

Pink and Co. (Fuerst Bros.)  
Greiff, R. W., and Co.  
Lofodan Cod Liver Oil Co.  
Kerfoot, T.

**GRANULAR PREP.**

Bishop, A., and Sons  
Blyton, Astley and Co.  
Curtis and Co.  
Hearon, Squire and Francis  
Hill, A. S., and Son  
Kerfoot, T.  
Wright, Layman and Umney

**GUM**

Pink and Co. (Arable, &c.)  
Deutschemann and Woronelski  
Greiff, R. W., and Co.  
Hyde, Nash and Co.  
Levmore Aug., and Co.

**HAIR PREP.**

Chesebrough Mfg. Co.  
Edwards and Co.  
Truefit, H. P. (Limited)

**KEB BEER EXTS**

Lakin, W. H.  
Newball and Mason  
Oldfield, Pattinson and Co.  
Potter and Clarke

**HERBALISTS**

Butler, McCulloch and Co.  
Newball and Mason  
Potter and Clarke

**HOMOPATHIC**

Keene and Ashwell  
Leath and Ross  
Thompson and Capper  
Watson and Waters

**HOSPITALS**

London Homoeopathic

**HYPOPHOSPHITES**

Duncan, Flockhart and Co.  
Fellows  
Fletcher, Fletcher and Co.  
Reade Bros. and Co.,  
Symes and Co.  
Tyke and King

**INHALERS**

Christy and Co.  
Evans Sons and Co.  
Hockin, Wilson and Co.  
Quelch, H. C.  
Sprengel, Co., The  
Toogood, W.

**INSECTICIDES**

Sanford and Co.  
Steiner and Co.  
Thompson, Walters, Hole and Co. (Lim.)

**INK [See MARKING]**

Bewley and Draper  
Duncan, Flockhart and Co.

**KETCHUP**

Tyner, P.

**LAMPS**

Clarke's

**LARD**

Ewen, J., and Sons

**LIFE ASSURANCE**

Standard Life Assurance Co.

**LINSEED POULTICE**

Seabury and Johnson

**LINT**

Liverpool Lint Co.  
Newcome, O.  
Robinson and Sons  
Seabury and Johnson

**LOZENGES**

Allen and Hanburys  
Blyton, Astley and Co.  
Gibson, E., and Sons (Mastars)  
Hill and Son  
Kerfoot, T.  
Pascual, J.  
Balmier and Co.  
Randall and Son  
Stern, G., and G.  
Warrick Bros.

**LITHIA**

Fuerst Bros.

**MACHINERY**

Beyer Prores.  
Burroughs, Wellsome and Co.  
Poster, F.  
Holroyd, J., and Co. (Lim.)  
Ollison, A.  
Pala and Co.  
Shoars and Son  
Werner and Pfleiderer

**MAGNESIA**

Andreas, Oscar, and Co.  
Bush, W., Son and Co.  
Dinnatford and Co.  
Greiff, R. W., and Co.  
Henry, T. and Co. (Unalined)  
Kerfoot, T. (Ollatrate)  
Quelch, H. C.  
Southwell, C., and Co. (Ollatrate)

**MALT EXTRACT, &c.**

Allen and Hanburys  
Baelz, R., and Co.  
Burroughs, Wellsome and Co. (Kerfoot's)  
Hearon, Squire and Francis  
Oppenheimer Bros. and Co.  
Reade Bros. and Co. (Biaculta)  
Wyleys and Co.

**MANICURE**

Preparation

Carmichael, M. W.  
Dr. Paul's

**MARKING INKS**

Barber, G., and Co. (Crimson)  
Hickson, J.  
Marx, M., and E.

**MEDICINE CHESTS**

Day, Son and Hewitt (Veterinary)  
Day and Sons (Veterinary)

**MENTHOL**

Al Menthol Depot, A. W.  
Shirley, Proprietor  
Cookline and Co.  
Evans Sons and Co.  
Hockin, Wilson and Co.  
Seabury and Johnson  
Thompson, Walters, Hole and Co. (Lim.)  
Tyner, P.

**MERCURIALS**

Fuerst Brothers  
Howards and Sons  
May and Baker (Limited)

**METHYLATED**

SPIRITS

Boord and Son  
Burroughs, J.  
Harvey, J. and W., and Co.  
Jones and Co.  
Phillips, G., and Co.  
Smith, S., and Co.

**METHYLENE**

Robbins, J., and Co.

**MICROSCOPES**

Darton, F., and Co.  
Perken, Son and Baymsal

**MILK**

Nestle, H. (Condensed)

**MIXING****MACHINERY**

Gardner, W.  
Werner and Pfleiderer

**MORPHIA**

Macfarlan, J. F., and Co.  
Smith, T. and H.

**OILS, PAINTS, &c.**

Colthurst and Harding  
Hugh Highgate and Co.  
Fox, W., and Sons

**ointment BASES**

Burroughs, Wellsome and Co.  
Chesebrough (Vaseline)  
Grindley and Co. (Petroleum Jelly)  
Reade Bros. and Co.

**OPTICIANS**

Botwright and Grey  
Darton, F., and Co.  
Lancaster and Sons  
Perken, Son and Baymsal  
Raphael and Co.

**OTTO OF ROSE**

Firth, H.  
Fuerst Bros.  
Moryoseph, A.  
Treath, R. C.

**PAPAIN PINKLER**

Kuhn, B.

**PEPSINE, &c.**

Burroughs, Wellsome and Co.  
Chassaling and Co.  
Fletcher, Fletcher & Stevenson  
Greiff, R. W., and Co.  
Newbery, F. & Sons (Ingluvin)  
Stern, G. and G.  
Warner and Co. (Ingluvin)

**PEPPERMINT OIL**

Cooking and Co.

**PATENT MEDONS**

Armbricht, Nelson and Co.  
Atkinson and Barber (Infant Preserv)  
Barelay and Sons (Limited)  
Beeham, T. (Pills)  
Crouch, F. B.  
Edwards and Son  
Evans, Lesscher and Webb  
Fennings' (Powders)  
Globe Chemical Co.  
Goodall, Backhouse and Co.  
Guy's Tonic  
Holloway (Pills and Oint.)  
Lalor (Phosphoryne, &c.)  
Linsol (Clarke's Mix.)  
May, Roberts and Co.  
Newbery and Sons  
Powell, T. (Limited)  
Radam's Microbe Killer Co. (Lim.)  
Roberts and Co. (Foreign)  
Sequah (Limited)  
Sutton, W., and Co.  
Thompson, Walters, Hole and Co. (Lim.)  
Voxeler, The Charles A., Co.  
Wilcox and Co.  
Wilford and Co.  
Wilson, A. (Bunter's Nerve)

**PATENT AGENTS**

Horn and Son

Thompson, W. P., & Co.

**PERFUMERY****FANCY SOAPS**

Bayley and Co.  
Blondens and Cie.  
Boehm, F.  
Burroughs, Wellsome and Co.  
Chesebrough Mangletrine Co.  
Chilswick Soap Co.  
Coward, G. F.  
Dee Oil Co. (Limited)  
Deutschemann and Woronelski  
Durrant, Geo. (Zwen Soap)  
Evans, Sons and Co.  
Farina, J. M.  
Firth, H.  
Graud Fils  
Green and T. S., and Son  
Hickson, J. (Lim.)  
Johnson and Co.  
Legrain, L.  
Wann, C. A., and Co.  
Mourard, J.  
Newbery and Sons (Berdoes)  
Oftinger, E.  
Pears' Soap  
Price's Patent Candle Co.  
Rosemarine Manufg. Co.  
Rouse and Co.  
Sainsbury, S. (Lav. Water)  
Shirley, A. W.  
Thompson, Walters Hole and Co. (Lim.)  
Tidman and Son  
Treath, R. C.  
Truefit, H. P. (Limited)  
Warrick Brothers  
West, T. (Oke's Mon)  
Woolley, Sons and Co. (Powder)  
Young, R. D.

**PETROLEUM**

Dee Oil Co. (Limited) (Jelly)  
Grindley and Co. (Jelly)  
Hamilton and Co. (Lim.)  
Hickson, J. (Lucilline)  
Snowdon, Sons and Co. (Jelly)

**PHARM. PREPS.**

Allen and Hanburys  
Barron, Harveys and Co.  
Bayley, C.  
Boehm, F.  
Burgoyne, Burdidge and Co.  
Burroughs, Wellsome & Co.  
Chassaling and Co.  
Dee Oil Co. (Limited)  
Deutschemann and Woronelski  
Duncan, Flockhart and Co.  
Fellows  
Fuerst and Co.  
Firth, H.  
Fletcher, Fletcher and Co.  
Fournier, Bion and Cie.  
Gill Schacht and Co.  
Greiff, R. W., and Co.  
Green, C., and Co.  
Hearon, Squire and Francis  
Hewlett and Son  
Hill, A. S., and Son  
Hooper, B., and Co.  
Howards and Sons  
Jeyes Sanitary Compounds Co.  
Jordan and Co.  
Kelt & Co. (Cone, Tinetruss)  
Layng, R. C.  
Marindale, W.  
May and Baker (Limited)  
Moryoseph, A.  
Potter and Clarke  
Rankin and Borland  
Ricques and Co.  
Roberts and Co.  
Southall Bros. and Barclay  
Sutton, W., and Co.  
Symes and Co.  
Trommsdorff, H.  
Tyner, T., and Co.  
White, Alfred, and Sons  
Willows, Francis and Outlet  
Woolley, Sons and Co.  
Wryles and Co.

**PHOTOGRAPHIC**

Botwright and Grey  
Darton, F., and Co.  
Fallowfield, J.  
Greiff, R. W., and Co.  
Howards and Son (Chemical)  
Lancaster, J., and Son  
Marion and Co.  
Orme, J., and Co.  
Perken, Son and Baymsal  
Tyner, T., and Co.  
White, Alfred, and Sons

**PILL MACHINES**

Palan, N., and Co.  
Pindar, J. W.  
Toogood, W. (Coater)  
Werner and Pfleiderer

**PORCELAIN COOD**

Toogood, (E.C. Pots, regist.)

**PILLS (Coated, &c.)**

Allen and Hanburys  
Anderson Apothecaries Hall  
Beeham, Thomas  
Blair's Gout Pills  
Blyton, Astley and Co.  
Champany, A., and Co.  
Eade's Gout Pills  
Evans, Sons and Co.  
Hearon, Squire, and Francis  
Hill, A. S., and Son  
Holloway's  
Hooper's  
Lloyd, T., Howard and Co.  
McKesson and Robbins  
Newbery and Sons  
Robinson's  
Wand, S.  
Warner, W. K. and Co. (Coated)  
Wryles and Co.



**PODOPHYLLIN, &c.**Keth, B., and Co.  
Smith, T. and H., and Co.**PLASTERS**Evans, Sons and Co.  
Johnson and Johnson  
Mather, W.  
Quilliam, J., and Co.  
St. Dunas, A. De  
Wesbury and Johnson  
Thompson, M. P. (Young, H.**POLISHING**Beckett, S.  
Bradley & Bourdieu (Albany)  
Chancellor, C., and Co. (Stovel)  
Fordham, W. B., and sons  
(Limited)  
Oskey, John, and Sons**PRINTING**Bowers Bros.  
Corran, J. R. (Glass)  
Ford, Shapland and Co.  
Silverlock, H.  
Townsend, J.**PUMELINE**

Stern, G. and G.

**QUININE SALTS**Andreas, Oscar, and Co.  
Boehringer, O. F., and Sohn  
Greiff, R. W., and Co.  
Howards and Sons  
Kuhn, B.  
Simmelmann and Co.**RENNET**Duncan, Flockhart and Co.  
Greiff, R. W., and Co.  
Oldfield, Pattinson and Co.**RESPIRATORS**Lynch and Co.  
Newbery, F., and Sons**SACCHARIN**Allen and Hanbry  
Burroughs, Wellcome and Co.**SALICIN**Macfarlan and Co.  
Smith, T. and H., and Co.**SALICYLIC ACID**Burgoyne, Burdidge and Co.  
Fuers, Bros.**SALT**Stern, G. & G. (Pepsalla)  
Tidman and Son**SALOL**

Kuhn, B.

**SAUCES, PICKLES**Goodall, Backhouse and Co.  
Mason, G., and Co. (Lim.)  
Tyrer, F.**SCHOOLS, &c.**City School of Chemistry and  
Pharmacy (Lim.)  
Liverpool School of Pharmacy  
London Homoeopathic and  
Medico School  
Manchester College  
Northern School of Pharmacy  
South London School of  
Pharmacy, Lim.  
South-west London School of  
Pharmacy  
The School of Pharmacy  
Westminster College**SHEEP DIP**Fletcher Bros. and Co.  
Greiff, R. W., and Co.  
Jaye's Sanitary Compounds Co.  
Wilkin's**SEED**

Potter and Clarke

**SHILOMENS**Ratby and Hinchliffe, (Ld.)  
British Syphon Co.  
Evans, Sons and Co.  
Lynch and Co.  
Way, Roberts and Co.  
Thessier, E.**SHOP FITTERS**Bowling and Govier  
Bygrave, J. and W.  
Evans, Sons and Co.  
Howlett, B.  
Katal, B.  
Pothe, H., and Co.  
Tyeble, G., and Co.  
Yates, W. S.**SOAP**Ayrton and Saunders  
Bayley and Co.  
Blondeau and Co. (Viella)  
Bronley, H., and Co.  
Oblawick Soap Co.  
Cook, E., and Co.  
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Fordham, W. R. & Sons (Ld.)  
James, F., and Co. (Dermatol)  
Jaye's Sanitary Compounds Co.  
Lenee and Co.  
Pears' Soap  
Stern, G. and G.**SPONGE**Gresswell Bros.  
Evans, Sons and Co.  
Peterson, M., and Co.**SPECTACLES**Botwright and Gray  
Darton, F., and Co.  
Perken, Son and Bayment  
Raphael and Co.**STAMPS (EVERETT)**Berkley, J.  
Hickinson, J.  
Pollard, A. W.**SPRIT**Boord and Son  
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Smith, Stephen and Co.**STARON**Beckett, S.  
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Barnett and Foster  
Sanders, H. G., and Son**STOVES**

Clark, S., and Co. (Lim.)

**SUGAR**Fletcher, Fletcher and  
Stevenson**SURGICAL**Ayrton and Saunders  
Bailey, W. H., and Son  
Barclay and Sons (Limited)  
Christy, T., and Co.  
Cooking, J. T.  
Eckmann Bros. and Walsh  
Haywood, J. H.  
Ingram and Son  
Liverpool Patent Lint Co.  
Robinson and Son  
Sanitary Wood Wool Co. (Lim.)  
Schute, F., and Co.  
Thompson, Walters, Hole and  
Co. (Limited)  
Tidman and Son  
Wood, F.  
Wood, Vincent**SULFONAL**Burroughs, Wellcome and Co.  
Greiff, R. W., and Co.  
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Kilner Bros.  
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De Luca, G. V.  
Schoenfeld, J. & J. Frères**SYRUPS**Fletcher, Fletcher (Liquors)  
Idris and Co.**TABLETS**Corran, J. R. (advertising)  
Gem Glass Co. (Ld.) (advertising)**TILL**

Stokes, G. B. &amp; Co.

**TEA**French and Langdale  
Gt. Tower St. Tea Co.  
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Darton, F., and Co.  
Evans, Sons and Co.  
Perken Son and Bayment**TINS**

Noakes, B., and Co.

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Hugleton and Coole (Lim.)  
Taddy and Co.**TOILET**Evans, Sons and Co.  
Fordham, W. B., and Son  
(Lim.)  
Glyzine Co.  
Hovenden and Sons (Euxetel)  
Lloyd, A. S. Euxetel  
Mumford, G. S.  
Queloh, H. O.  
Rowland, A., and Sons  
Truett, H. C. (Limited)  
Woolley, Sons and Co.**TOOTH PASTE**Jewehury and Brown  
Snitton, O., and Co. (Block)  
Wilson, A. (Hunter's)  
Woods, M. (Areen)**TRADE MARKS****TRUSSES**Bailey, W. H., and Son  
Gulwell, H. M.  
Evans, Sons and Co.  
Haywood, J. H.  
Mather, W.  
Thompson, Walters, Hole and  
Co. (Lim.)  
Wood, F.  
Wood, V.**VENTHANE**

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**VACCINATION**

Vaccine Association (Lymph)

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Brett, F. J.  
Crooker, G. B.  
Orridge and Co.  
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Chesebrough Manufacturing Co.**VERMIN KILLERS**Sanford and Son  
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Blondeau and Co.**VETERINARY**Day and Sons  
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James, W. H. P. Masters'  
Jaye's Sanitary Compounds Co.  
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Learner, A. J.  
Lloyd, T., Howard and Co.  
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Bush, W., Son and Co.  
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Clay, Dod and Co.  
Coward, G. F.  
Pakin Brothers  
Evans, Sons and Co.  
Evans, Leocher and Webb  
Evans and Sons (Limited)  
Ferris and Co.  
For, W., and Sons  
Goodall, Backhouse and Co.  
Harker, Stagg and Morgan  
Hearon, Squire and Francis  
Hewlett and Son  
Hill, A. S., and Son  
Hodgkinson, Treacher  
Clarke  
Lofthouse and Saltmer  
Lloyd, T., Howard and Co.  
Macfarlan, J. P., and Co.  
Oldfield, Pattinson and Co.  
Potter and Clarks  
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Thompson and Capper  
Thompson, Walters, Hole and  
Co. (Limited)  
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Woolley, Jas., Sons and Co.  
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Coleman and Co. (meat and  
Durrant, G. (Oranges) Malt.  
Goodall, Backhouse and Co.  
Idris and Co.  
Miller, A., and Co.  
Robinson, B.**F. NEWBERY & SONS' CHEST PROTECTORS**

Prices for which are as follows:—

	Per doz.	Net.
Single (Fig. 1).—No. 1 .. .. .	£0 6	0
" " 2 .. .. .	0 8	0
" " 3 .. .. .	0 9	6
" " 4 .. .. .	0 11	0
" " 5 .. .. .	0 15	6
" " 6 .. .. .	1 6	0
Double (Fig. 2).—No. 1 .. .. .	0 14	0
" " 2 .. .. .	0 18	6
" " 3 .. .. .	1 2	6
" " 4 .. .. .	1 8	0
" " 5 .. .. .	1 16	0
" " 6 .. .. .	2 4	0
Chest "Protectors. Newbery's "The Winter" (Vest Pattern, to button in front, Fig. 3). Donble only, scarlet		
No. 1 .. .. .	0 18	0
" 2 .. .. .	1 4	0
" 3 .. .. .	1 10	0
" 4 .. .. .	1 16	0
" 5 .. .. .	2 2	0



Single



Double.



"The Winter."

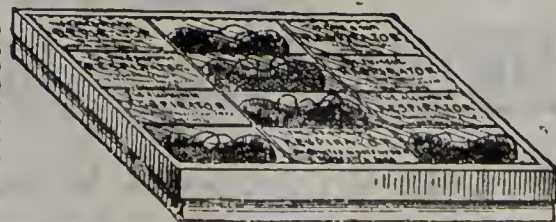
**F. NEWBERY & SONS' RESPIRATORS**

Have been known to the Trade for many years as thoroughly reliable, and as being safe and effective in use.

Prices.		Per doz.	Net.
Retail 1/-	Cork	£0 7	0
" 1/-	Metallic	0 7	6
" 1/6	"	0 10	0
" 2/-	"	0 14	0
" 2/6	"	0 17	0
" 3/6	"	1 7	0
" 5/-	"	1 16	0
" 6/-	"	2 5	0
" 8/-	"	2 17	0

No. 1 Counter Case, of 1 doz. assorted, viz. 3 at 1/-, 1/6, and 2/6, and 2 at 3/6, and 1 at 6/- each retail. Per case, 17/- net.

No. 2 Counter Case, of 1 doz. assorted, viz. 4 each 1/-, 1/6, and 2/6 retail. Per case, 11/- net.



Glass Show Case of Respirators.

**F. NEWBERY & SONS, PATENT MEDICINE VENDORS, PERFUMERS, & SUNDRIESMEN**

Established A.D. 1746.] 1 KING EDWARD STREET, LONDON, E.C. [Established A.D. 1746.



# A. S. LLOYD'S EUXESIS, FOR SHAVING WITHOUT SOAP, WATER, OR BRUSH.

## CAUTION.

The labels on genuine EUXESIS bear signature of Inventor, A. S. LLOYD, in *BLACK INK*, and the signature of his Widow, AIMEE LLOYD, in *RED INK*. Refuse all others.

Manufacturer: **AIMEE LLOYD** (WIDOW OF A. S. LLOYD, formerly of 27 GLASSHOUSE STREET)  
3 SPUR STREET, LEICESTER SQUARE, LONDON

N.B.—When ordering from Wholesale Houses, write "LLOYD'S EUXESIS (WIDOW'S)."

# E. C. Z. A.

## THE NEW SKIN SOAP,


MADE ONLY BY

**BAYLEY & CO., 17 COCKSPUR ST., LONDON,**

THE SOLE AND ORIGINAL MANUFACTURERS OF

"ESS. BOUQUET" PERFUME and of the Celebrated "SPERMACEI SOAP TABLET."

## PERFUME SPRINKLERS,

ALSO FOR 

HAIR WASHES, CREAMS,  
OILS, INKS,

&c.

11



MANUFACTURERS:

**H. G. SANDERS & SON,**

Victoria Works, Victoria Gardens, Notting Hill Gate, LONDON, W.

Established 1820

Telegraphic Address: "COLLAPSIBLE LONDON."

# WE MAKE FOR THE TRADE

"PRIVATE BRANDS"

SUPERFATTED & DE-HYDRATED TOILET SOAPS

(ACCORDING TO DR. UNNA'S SUGGESTION).

STEAM WORKS—34 VERULAM ST., HOLBORN, LONDON, E.C.

**H. BRONNLEY & CO.**

LARGEST TOOTH SOAP COMPRESSERS IN THE WORLD.



# A. S. LLOYD'S EUXESIS,

For Shaving without Soap, Brush, or Water.

## CAUTION.

The only Genuine has a yellow label printed ONLY in Black Ink, and bears the original address of the late inventor, "27 Glasshouse Street, Regent Street," the proprietors having purchased under an administration suit, the Secret, Trade Mark, Goodwill, and Premises.

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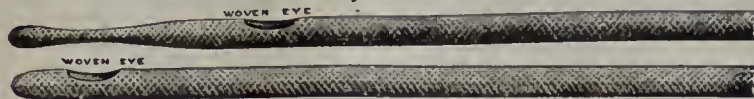
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SOFT SILK FLEXIBLE CATHETER, GUARANTEED WITH WOVEN EYES.

To be had of all Surgical  
Instrument Makers  
and Wholesale Houses.



To be had of all Surgical  
Instrument Makers  
and Wholesale Houses.

The only make of  
**CHEST PROTECTORS**  
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WITHOUT INJURY.



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**LIVERPOOL LINT CO.**  
MARK ST. MILL,  
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**LINT.**  
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(PATENT ABSORBENT GAUZE AND  
COTTON WOOL.)

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ROLL BANDAGES

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NEAR CHESTERFIELD.

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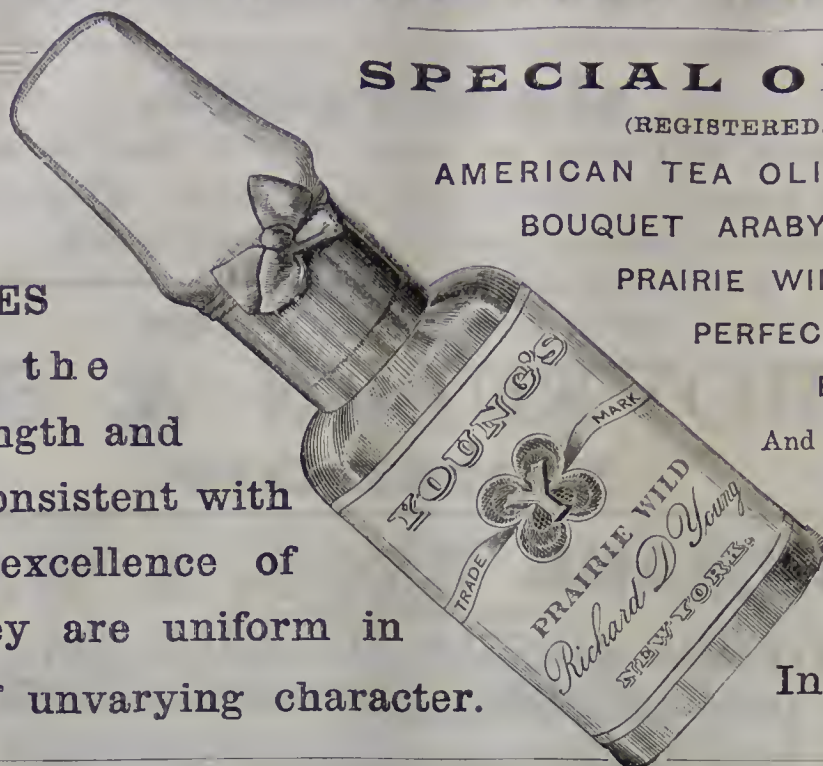
## SPECIAL ODORS.

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YOUNG'S

PERFUMES

combine the  
greatest strength and  
endurance consistent with  
the highest excellence of  
quality. They are uniform in  
merit and of unvarying character.



AMERICAN TEA OLIVE,

BOUQUET ARABY, LILY BELLS

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PERFECT VIOLET,

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And the usual staple  
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HOUSES.In 1-oz. & 2-oz.  
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European Depot—HATRICK &amp; CO., LIMITED, 31 Snow Hill, LONDON, E.C.

## WHITE AND SOUND TEETH.

JEWSBURY &amp; BROWN'S

## ORIENTAL TOOTH PASTE.



This old-established and increasingly favourite Dentifrice has been over Sixty Years before the Public. It is warranted to retain its properties and keep in good condition in any climate. The original and only genuine is manufactured solely by

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and is distinguishable by the Trade Mark, printed in red and green, a facsimile of which is annexed. Particular attention should be paid to this guarantee of genuineness, as numerous imitations are offered. Sold universally by Chemists and Perfumers, at 1s. 6d. and 2s. 6d.

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Dunster House Mining Lane  
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IMPORTER OF

Musk Civet Ambergris Attar - of - Rose

**ESSENTIAL OILS**



Wholesale  
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# ENGLISH "SALVO PETROLIA" VERSUS AMERICAN VASELINE.

PARIS EXHIBITION, 1889,  
**GOLD MEDAL**  
AWARDED TO

# "SALVO PETROLIA" (VASELINE).

Absolutely Genuine Paraffinum Molle of the  
very Purest Form, and we claim that it  
is superior to Vaseline.

PACKED IN TINS, 1, 5, 10, 14, 28, 56, AND 112 LBS.

# "OLEUM DEELINÆ"

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UNIVERSALLY ADOPTED BY THE MEDICAL PROFESSION FOR  
OPHTHALMIA, SCURVY, RINGWORM  
ECZEMA, SKIN-DISEASES,

For External and Internal Irritation of every kind.

PACKED IN CASES—

One Doz. 1s. 6d. Bottles; One Doz. 2s. 6d. Bottles;  
or half of each.

TESTIMONIALS MAY BE HAD UPON APPLICATION.

# "Edible Salvo Petrolia"

For Public Speakers, Actors, and Singers.  
1s. 6d. per Tube.

The above are Manufactured Solely by the Proprietors,

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Works—SALTNEY, CHESTER.

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# H. P. TRUEFITT'S SPECIALITIES FOR THE HAIR.

Floral Extract, 3/6, 5/-,  
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Egg Yulep, 2/-, 4/-.  
CONCENTRATED

Egg Yulep, 2/6,  
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Golden Fluid,  
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EUXURON,  
1/6.  
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Stimulating Lotion, 5/-  
10/6.

Astringent and Tonic  
Lotion, 5/-, 10/6.

Quinine and Arnica

Hair Wash, 3/6,

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Arnica Wash

3/6, 5/-,

10/6.

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**EUCHRISMA.**  
Combines in one clear fluid every valuable  
Component both of a Hair Dress and Wash.  
3/6, 5/-, 10/6, 21/-.

An elegant Preparation for  
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Price 2/6, 3/6, 5/-, 10/6, 21/-.

**EAU RACINE.**  
For restoring the original colour of Grey Hair;  
superior to all other Restorers, being perfectly  
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H. P. TRUEFITT'S TONIC TOOTH BRUSH

(BY ROYAL LETTERS PATENT.)

PRICE ONE SHILLING.

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# Dr. ZIEMER'S ALEXANDRA- DENTIFRICE.

Matchless for the  
Teeth, Gums, and Breath!

Guaranteed Non-  
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Of all  
Wholesale  
Houses.



Prices:

1/3 size 9/-

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# WARRICK

**Real Heliotrope** ♦♦♦♦♦

**Flower-Flavoured Cachous.**

Real Violets, Real Roses, Real Jasmin, Real Lavender Cachous.

3 - per lb., splendidly labelled; 4/- per dozen Boxes, gold embossed on calf.

18 OLD SWAN LANE, LONDON, E.C.

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# FRANK WOOD

(From W. WOOD & SON, MANCHESTER),

**42 BELVOIR STREET, LEICESTER.**

Trusses, Single...	...	...	12/6 per doz.	Elastic Stockings, Cotton	...	2/2 each.
„ Double	...	...	20/- „	„ „ Silk	...	3/4 „
„ Single Femoral	...	...	17/- „	Suspenders, Cotton Bags	...	6/6 per doz.
„ Double	„	...	28/- „	„ Silk Bags	...	14/- „
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**TERMS**—5 per cent. discount Cash; 2½ per cent. discount Monthly.

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**THE BEST HOUSE IN LONDON FOR DRUGGISTS' SUNDRIES, ETC.**

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In Boxes, Bags, and small Packets, to suit all consumers; and many other attractive Specialties.

**SPONGES, SURGICAL APPLIANCES, PERFUMERY, COSMETICS, ETC., ETC.**

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VISITORS TO LONDON INVITED TO CALL AND INSPECT SHOW-ROOMS.

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**NOTICE !!!—THE MOST PROFITABLE BRAND.**

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Of COLOGNE, having been Awarded the SPECIAL FIRST PRIZE MEDAL  
for their Celebrated

**EAU DE COLOGNE**

AT THE

**SYDNEY EXHIBITION, 1879,**

Have the pleasure to announce to the Public that they have also obtained the First Prize Medal at the  
**MELBOURNE EXHIBITION, 1880.**

They trust that the above distinctions conferred upon them by such expert judges will be sufficient guarantee that the Eau de Cologne of their manufacture is, **without doubt, the best.** They beg to append a List of Prize Medals obtained at other Exhibitions:—

LONDON, 1851.  
PARIS, 1855.

RHENISH PROVINCES, 1852.  
LONDON, 1862.

NEW YORK, 1853.  
VIENNA 1873.

The above Firm only export to England their DOUBLE Eau de Cologne, and request their Customers, in comparing the Prices of the different Brands, to take into consideration that the bulk of those sold with the white label are single (or only half strength of the Double), which enables the Makers to sell at a low price with great profit. If they will trouble to compare the subjoined Prices with those of any firm manufacturing Eau de Cologne DOUBLE, the comparison will be greatly in favour of our Brand.

**PRICE LIST.**

	Duty Paid, Net.	In Bond.		Duty Paid, Net.	In Bond
No. 1.—Half Shorts.....	8/6	5/6	No. 4.—Long Green Flasks.....	16/-	11/-
No. 2.—Shorts.....	16/-	11/-	No. 5.—Wickered Bottles (Small)...	26/6	19/3
No. 3.—Shorts (finely Wickered) ...	21/3	16/6	No. 6.—Wickered Bottles (Medium) 53/-		38/6
No. 7.—Wickered Bottles (Large).....			106/- duty paid, net; 77/- in bond.		

Small Cases assorted to order (of not less than £3 value in bond) delivered free freight, less 7½ per cent. discount.

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**C. E. MASON & CO.,**  
**2 BEECH STREET, LONDON, E.C.**





# A GREAT MISTAKE

## Has been Made

in our

# EXPECTATION

Of the number of applications we should have from dealers for our 48-page book "A Souvenir," as the result of our double-page Advertisement in the mid-winter Special number of *The Chemist and Druggist*. We should have been quite satisfied if we had received two or three hundred, but, instead of that, we have received upwards of 600, and they still keep coming, ordering a supply of the "Souvenir," which we supply with dealers' names and addresses printed on free, and carriage paid or enclosure to a London house. With orders for the "Souvenir," counter-wrappers, panel-transparencies, and show-cards come orders for our book "Do you Know How to Cook Fish?" price 3d., which we supply at 8s. per 100, with dealer's card printed on, carriage paid. This book is meeting with a tremendous sale. It is new, novel, and interesting. One dealer, after selling his first hundred, orders 1,000, and says:—"I can make more money on your book 'Do you Know How to Cook Fish?' than I can on Patent Medicines, for I get full prices, and they sell rapidly."

We have now to inform dealers that the demand for the "Souvenir" and "How to Cook Fish" has been such an unprecedented one that it will be quite impossible for us to make delivery on orders which we receive hereafter in less than two weeks from the time they are received.

Remittances on "Do you Know How to Cook Fish?" will be acknowledged on receipt, and the order will be executed as soon as possible.

Dealers, please take notice that there is no charge for the book "A Souvenir," or any of our advertising specialities, except the book "Do you Know How to Cook Fish?" which is 8s. per hundred, retail price 3d. Dealer's name and address printed on both books. Our 4, 6, and 8 oz. counter-wrappers (illustrated), in 64 different designs, are superior to any. Our revised Price List places dealers who purchase six dozen ST. JACOBS OIL on one order on exceptional terms.

p.p. THE CHARLES A. VOGELER CO.,

WILLIAM E. GEDDES (European Manager),

45 FARRINGTON ROAD, LONDON.



# THE VERDICT

## CONFIRMED.

“The therapeutie value of extract of malt rests not only upon  
 “the presence of important food elements, as dextrin, maltose, and  
 “alkaline phosphate, but on the peculiarly active substance, diastase,  
 “which is concerned in converting the starch of farinaceous food  
 “into the more assimilable products. The masterly researches of  
 “Messrs. C. O. Sullivan, Brown, Heron, and Morris have shown  
 “that diastase is without action upon unaltered starch, or starch as  
 “it occurs enclosed in the cell. As soon, however, as the cellulose  
 “envelope of the granule is broken either by bruising or boiling,  
 “the starch granule rapidly undergoes conversion or hydrolysis,  
 “even in the cold, into maltose and a variety of dextrin called  
 “erythro-dextrin. It is some time now since we had occasion to  
 “examine the well-known and much-used KEPLER EXTRACT  
 “OF MALT. Messrs. Burroughs, Wellcome & Co. evidently keep  
 “pace with the newest scientific facts, which every day contribute  
 “towards making this kind of preparation perfect. This is shown  
 “by the following analysis of a specimen which was recently  
 “submitted to us.

*“One part by weight of Extract was found to completely convert  
 “in one hour at 100° F. seven times and a-half its weight of starch  
 “into maltose and dextrin; in two hours at the same temperature fifteen  
 “times its weight of starch, and in three hours no less than thirty times  
 “its weight. Probably at a higher temperature KEPLER EXTRACT  
 “OF MALT would be capable of converting a still larger quantity.*

“Moisture, 18.41 per cent.; solid matter (diastase, albuminoids,  
 “maltose), 80.37 per cent.; mineral matter (for the most part soluble  
 “phosphate), 1.22 per cent. The flavour has been further improved,  
 “and the delicacy of the colour contributes largely to its attractive  
 “appearance.”—*Lancet*, January 31, 1891.

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Please note the reduced prices:—Kepler Extract of Malt and Kepler Extract of Malt with Cod Liver Oil (Kepler Solution) are supplied to the Trade in  $\frac{3}{4}$ -lb. and  $1\frac{1}{2}$ -lb. Bottles at 20/- and 36/- per dozen.

SUBJECT TO USUAL DISCOUNT.

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**BURROUGHS, WELLCOME & CO., Snow Hill Buildings, LONDON, E.C.**



# Soluble "Tabloids" of Compressed Drugs

We call particular attention to our recent reduction in prices, which we were able to make on account of our improved facilities and large output. Price Lists and Trial Specimens of Soluble "TABLOIDS" post free on application.

"TABLOIDS" OF SULPHONAL AND OTHER SPARINGLY SOLUBLE DRUGS.

"We have examined 'TABLOIDS' of Compressed Sulphonal, Phacetin, &c., sent by Messrs. Burroughs, Wellcome & Co., Snow Hill Buildings, E.C., and find that when they are put into water they readily break and fall into powder, which can be easily suspended by shaking. Placed upon the tongue, they immediately begin to soften and DISINTEGRATE. This specially compressed form possesses, therefore, the great advantage of permitting the subsequent absorption of insoluble drugs in consequence of the fine state of division into which they are reduced in the stomach."—*British Medical Journal*.

**BURROUGHS, WELLCOME & Co., Snow Hill Buildings, LONDON, E.C.**

See Recommendatory Notice of Medical Press and Opinions of the leading Dermatologists.

## WRIGHT'S

Detergeas, acting for four hours, arrested future growth."

Of all Druggists, Wholesale and Retail, throughout Great Britain, Ireland, and Colonies.

## LIQUOR

From the *Lancet*, Dec. 22, 1886:—"In our hands it has been a most effective agent in skin diseases, especially of the chronic eczematous class, and one class of psoriasis which had resisted all other kinds of treatment speedily got well under the application of the *Liquor Carbonis Detergens*. We esteem it a very valuable addition to our list of skin remedies."

1871:—"We have tested it, and can affirm its value as a detergent agent. We consider the Liquor is an article of great utility."

Kept in stock and sold by all Druggists (Wholesale and Retail) throughout the United Kingdom and Colonies. PROPRIETORS—

**W. V. WRIGHT & CO., 48 Southwark Street, LONDON.**

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MELBOURNE AND SYDNEY, AUSTRALASIA.

Published every Saturday.

Subscription 10s. per year, payable in advance; dating from the commencement of any month.

Supplied only to persons connected with the Trade.

Post free to every country in the world. Single copies 4d. each.

Cheques or Postal Orders should be payable to EDWARD HALSE, and crossed MARTIN & Co.

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CHEMISTS' ASSISTANTS' ASSOCIATION.—The next meeting will take place on Thursday, February 26, when a paper on "The Telephone and Phonograph" will be read by J. J. Smith.

CHEMIST AND SANITARY REFORMER.—Mr. George Eade, Goswell Road, spoke warmly at the St. Luke's (Middlesex) Vestry last Tuesday in favour of abolishing a large number of the hovels in the courts of the parish. Mr. Eade contended that, if the Vestry did not call upon the owners of the decayed properties to make their houses habitable or demolish them, the County Council would do so, and charge the parish. He was not in favour of assisting the landlords. Mr. Blake seconded Mr. Eade's motion for immediate reparation or demolition, and it was unanimously adopted.

THE USE OF CHEMICALS IN THE DEODORISATION OF SEWAGE.—The London County Council, as has been frequently reported in these columns, has from time to time expended large sums of money for the purposes of sewage deodorisation. At the last meeting of the Council, on Tuesday, a report was received from the chemist of the Council stating that the Harris-Reeves process of deodorisation, for the purpose of carrying out experiments with which the Council, on September 30 last, sanctioned the expenditure of a sum of 25l., was now ready for inspection, and suggesting that the experiment should be carried on for some months and kept under observation. On the recommendation of the Main Drainage Committee the Council agreed to a further trial of the system being made for a period of three months.

CHOKED BY A FEEDING-BOTTLE.—An inquest was held by Dr. Danford Thomas, at Marylebone, on Wednesday, concerning the death of a boy, three months old, named Events, the illegitimate child of a domestic servant, which had been intrusted to the care of a Mrs. Broone, of Little Marylebone Street. The child was fed with a feeding-bottle, the neck of which was provided with an india-rubber teat. Below this there was a bone shield, beneath which the india-rubber tubing was attached to a glass reservoir. When on the previous morning the child was given the bottle, the tubing became detached from the glass reservoir, and the teat and shield stuck in the infant's windpipe. Although the infant was at once taken to a neighbouring doctor's, it was choked before the obstruction could be removed. The coroner said unless the tubing was tied tightly over the top of the glass reservoir this kind of feeding-bottle must inevitably prove dangerous. The jury returned a verdict of "Accidental death."

APPLICATION AGAINST A CHEMIST.—On Tuesday, in the Westminster County Court, the case of Geech v. Stevenson came before his Honour Judge Bayley as a judgment summons. The defendant did not appear, and the plaintiff asked his honour to grant an order of committal. Defendant was a chemist in business in Basinghall Street, and was apparently doing well. His Honour: But he has written to the court saying that he has sold the business. Plaintiff: I was through the street only a few days ago, and he was there then. That was certainly since the judgment, and the name was still up over the shop. His Honour: I see you have let it run on till there are ten instalments overdue. Plaintiff: I know I have allowed it to run on rather a long time. His Honour: I can only grant an order for instalments. Plaintiff: But you have granted committals before when the instalments have fallen in arrears, and he brings the money up then. His Honour: If you will go to sleep, you must take the consequences, you know. I cannot commit with all these instalments overdue. Plaintiff: But you did in 1889, when there were several instalments due, and he paid the money then. He will never pay unless you give a committal order. His Honour: There will be a new order of 10s. a month.

A PLUCKY YOUNG LADY.—Messrs. Lorimer & Co., wholesale chemists and druggists, of Britannia Row, Islington.



would at present be *minus* some 56*l.* had it not been for the presence of mind and determination of a young lady in their employ (Miss Thomson), aged 18. Last Friday Miss Thomson was sent to the local branch of the London and County Bank in Upper Street to cash a cheque for 56*l.* odd, and was returning with the money in a bag when she was rather roughly tapped upon the shoulder by a young fellow from behind, who said he was the bank manager's son, that there was something wrong with the cheque she had just presented, and that he had instructions to take the money back to the bank. Miss Thomson, however, did not lose her presence of mind, and argued that if the writer of the cheque had, as the young fellow alleged, put two "r's" instead of one in "Lorimer" it was very curious; but she would go back to the bank with her questioner; she would not allow him to carry the bag. To this the fellow stammeringly replied that he would not trouble her; but she must send Mr. Lorimer to the bank immediately on her getting back to the office. It turned out that the story of the spoilt cheque was a fabrication, and we understand that the firm have presented Miss Thomson with a good silver watch as a memento of the event.

**STRIKE PROPHYLACTIC.**—Messrs. Idris & Co., mineral water manufacturers, of Kentish Town, last week invited their hands to a tea and musical entertainment, and to hear proposals from the firm on a system of profit-sharing. Nearly 400 responded, and spent an enjoyable evening. Mr. T. Howell Williams, L.C.C., the head of the firm, said the wages they paid now were regulated simply by what their competitors paid; but if by combination or in any other way the men could raise the rate the firm only wished them every success. (Applause.) They fully recognised that the people employed in any industry were quite entitled to a fair share of the profits. In considering whether their men had a fair share, the firm had studied the figures and found that in some years the workpeople had received more than could possibly be continuously allowed to them, and in other years—such as last year—they might have received more than was paid in wages. The solution of the problem was to be found in the firm sharing profits with the workpeople. (Applause.) He wished to distinctly impress upon them that they were not to consider it as any set-off against their wages, for they would always be willing to consider any claim for advance or readjustment of wages without any reference to the share of profits. The firm's proposal was that after payment of interest on the capital and fair salaries to the partners for management, the whole of the profits should be divided equally in proportion to the capital employed in the business and to the wages obtained by the workers. For instance, every person receiving 50*l.* or 100*l.* per annum would obtain at the end of the year exactly the same amount of profit as was appropriated by 50*l.* or 100*l.* of the firm's capital. (Applause.) The proportion now proposed to be allotted to them would amount on the basis of last year's balance-sheet to about 350*l.* per annum. (Cheers.) He thought there should be some distinction made in the rate of distribution among piece hands and time hands, and in the proportion to be allotted to occasional workers and to permanent hands; but all those matters they would leave open until the system was in vogue. Mr. Williams concluded by trusting that all that was hoped for would be realised.

### Provincial Reports.

*Items of news, and newspapers containing matters of interest to the trade, sent to the Editor will much oblige.*

#### BRIGHTON.

**THE JUNIOR ASSOCIATION OF PHARMACY.**—The members of this association held a "Microscopical evening" last week. Thanks to the efforts of Mr. Colman, a fine array of microscopes had been obtained from various chemists, and a number of interesting objects were shown. Next week Mr. Marshall Leigh will give an address to the members relative to the proposed Pharmacy Acts Amendment Bill, and the association is arranging a dance, to be held at the Royal Pavilion shortly.

#### LIVERPOOL.

**CHEMISTS' ASSOCIATION.**—Mr. Anthony S. Buck has been appointed honorary secretary in the place of Mr. J. Bain, who, after five years' very good service in that capacity, has resigned. The date for holding the *conversazione* has been fixed for March 5. There will be a few exhibits, but the entertainment will be chiefly musical; an excellent programme, it is understood, has been prepared by Mr. Bain.

#### PLYMOUTH.

**WANTED JUSTICE.**—At the Borough Police Court, on Monday, before the Mayor and other magistrates, Mr. Carveth, chemist, asked permission to make a complaint against a person whose name did not transpire. He was about to state his grievance, when the Mayor requested him to sit down until the ordinary business of the court had concluded. Mr. Carveth complied, but after a short deliberation again rose and endeavoured to make himself heard. No attention being paid him, he exclaimed, in an excited manner, "It is most dishonourable. I will have justice." Detective-Inspector J. Hill here interposed, and Mr. Carveth was removed from the court shouting, "It is not justice."

#### IRELAND.

**REGISTERED DRUGGISTS.**—An examination for the qualification of "registered druggist" is fixed in Dublin for March 5, after which, at an early date, candidates will be examined in other towns. The fee for registration and examination is fixed at 4 guineas.

**CHARGE OF ABDUCTION.**—Henry C. Harvey, described as a chemist and medical student, has been tried at the Commission Court, Dublin, on a charge of abduction of a young girl, under 18 years of age, named Annie Clowry. He was found guilty, and sentenced by Mr. Justice O'Brien to twelve months' imprisonment with hard labour. The name does not appear on the register of pharmaceutical chemists of Ireland.

**COMMERCIAL MORALITY IN BELFAST.**—Dr. J. F. Hodges, the county analyst, in his annual report to the Belfast Board of Guardians, expresses the opinion "that the inspection of articles of food under the Sale of Food and Drugs Act has produced a large annual decrease in the number of cases of adulteration in the city. From October, 1873, to October, 1874, I find of 185 articles examined by me 77 were found adulterated; from February, 1889, to February, 1890, of 224 articles examined 32 articles were adulterated; while from February, 1890, to the present date, of 221 articles examined only 19 articles were adulterated."

**THE PLAN OF CAMPAIGN.**—Dr. John F. O'Ryan, of Tipperary, whose manifesto we published last week, appeared at the police-court on February 12, on remand, charged with having obstructed and resisted the sub-sheriff in the discharge of his duty by barricading his apothecary's establishment, and forcibly preventing the bailiffs from entering for the purpose of making a seizure upon the goods therein. For the defence it was argued that the method adopted by the sheriff was illegal, inasmuch as the defendant was only one in the partnership of the shop, and the wording of the *fi. fa.* of the seizure was for the goods of the defendant, and that therefore the defendant had only acted within his right in protecting the goods of others. Decisions of the superior court in support of this argument were quoted, but, after hearing evidence, the magistrates held that the resistance took place before any goods had been seized, and that the charge was established. Dr. O'Ryan and his co-defendant, Mr. M. O'Ryan, were each sentenced to be imprisoned for seven days in Clonmel gaol with hard labour, and required to enter forthwith into recognisances, themselves in 100*l.* each, and two sureties of 50*l.* each, in default of which they would be imprisoned for a period of three months.

#### SCOTLAND.

##### DUNDEE.

**CHEMISTS' ASSISTANTS' AND APPRENTICES' ASSOCIATION.**—At the meeting on Thursday, February 12, Mr. James



McDonald, of the Royal Infirmary, read a paper entitled "Dispensing Notes." At next week's meeting there will be short papers, and the following are already promised:—"How to Become a Pharmaceutical Chemist, and What Comes Afterwards," by Mr. Charles Duncan; "Salicylic Acid," by Mr. William Moir; and "Mistura Olei Ricini, B.P.," by Mr. James Kinnear.

## General News.

**A VIOLENT CHEMIST'S ASSISTANT.**—At the Barnstaple Police Court, Richard Nash Lee Morgan, described as a chemist's assistant and married, has been bound over to keep the peace towards his mother, whom he had threatened when making demands for money.

**THE CHEMICAL SOCIETY'S** meeting on Tuesday afternoon next is not to be held in the Society of Arts Rooms, but in those of the Royal Society at Burlington House. It seems that the number of fellows who have promised to attend is much larger than was expected.

**THE DRUGGISTS WERE SUSPECTED**—At the meeting of the Rotherham (Yorkshire) Board of Guardians on Monday last, the clerk read a letter from Mr. W. D. Walton, master of the workhouse, emphatically denying that he had received presents from druggists and other tradespeople.

**A NURSE DISPENSES.**—At a meeting of the Stoke-on-Trent Guardians on February 12, the Finance Committee reported on the question of dispensing medicines at the workhouse. They found that the practice was for the medicine to be prepared by the nurse under the immediate direction of the medical officer, who was solely responsible to the guardians for the care and accuracy with which the work was done. The nurse, although not technically qualified as a dispenser, had had the training and experience of upwards of twenty years. In the event of any rearrangement being made in the medical officer's department the guardians would probably consider the desirability of appointing a dispenser or resident medical officer. The board, however, considered that they had an excellent medical officer in Dr. West, and it would be a pity to disturb the present arrangements.

**MESSRS. DUNN & CO.'S PLATINUM.**—John Bruce, who was charged with receiving 99 oz. of platinum, of the value of 350*l.*, the property of Mr. Spencer Dunn, chemical manufacturer, West Ham, was tried at the Central Criminal Court, on February 14, before the Recorder. Defendant was a jeweller and optician in the Clerkenwell Road, and in January last he offered some platinum for sale to Messrs. Johnson, Matthey & Co., assayers, Hatton Garden. They recognised the metal as similar to that used by them in some dishes which they made for the prosecutor, and stolen in October last. Defendant was unable to produce the person from whom he purchased the metal, and when told that it was stolen he expressed surprise and made no concealment whatever. In defence, witnesses were called to prove that this metal had not been used in the chemical process for which the stolen dishes were required; and it was also contended on his behalf that he had acted perfectly *bona fide* in the matter. The jury, after a very long deliberation in private, acquitted the defendant, and he was discharged.

**POISONS SOLD AT GENERAL SHOPS.**—At the Central Criminal Court, on February 13, Susannah Field, 16, was indicted for administering to Mary Ann Field some phosphorus paste with intent to injure, aggrieve, and annoy. Mr. Forrest Fulton, who prosecuted, said the case was one of importance, as it showed the facility with which persons could possess themselves of poisons from a general shop which they could not get from a pharmaceutical chemist's without an order from a doctor. It was alleged on the part of the prosecution that the prisoner administered phosphorus paste to her mother in some porter. She had bought at a general shop some phosphorus paste rat-poison, and was told at the shop that it was poison. She then bought some porter, into which she put some of the paste and took it to her mother, who was ill. Her mother did not drink any, seeing that it was "flat," but she poured it away and saw that there was a sediment. The prisoner told a police officer that a young woman had told her

to put the paste in the beer as it would do her mother good, but this was denied by the young woman. The jury found the prisoner guilty, and said they desired to state that in their opinion the attention of the authorities should be called to the loose way in which these poisonous things were sold, and then strongly recommended the prisoner, on account of her youth, to mercy. Mr. Justice Charles: It does seem a most dangerous thing that people can go into a shop and buy enough poison to kill four or five people. His lordship sentenced the prisoner to three months' imprisonment.

## Foreign News.

**THE AMERICAN PHARMACEUTICAL ASSOCIATION** will meet at New Orleans on April 27. On this occasion no patent medicines will be allowed to be shown in the exhibition.

**PHARMACY LAW IN RUSSIA.**—A new law on the dispensing functions of pharmacists is about to be promulgated in Russia, the present Act on that subject having proved unsuitable because of its obscure wording. A list of medicines to be sold by pharmacists only is also to be drawn up.

**INSTITUTE OF CHEMISTRY IN ST. PETERSBURG.**—A new chemical institute is to be built in St. Petersburg. In connection with this project, Professor Menschutkin has been commissioned by the Russian Government to visit the principal institutes of chemistry of the world, in company of an architect, in order to obtain hints for the new building.

**PHARMACY IN THE SPANISH CORTES.**—It does not appear that any members of the pharmaceutical profession were elected to the new Spanish Cortes, but the *Farmacia Española* congratulates its readers upon the return of D. José Muro Lopez, for Valladolid. Sr. Lopez, who is an ex-Minister of State, had made himself the champion mouth-piece of the Spanish pharmacists in the dissolved Parliament, and is looked upon specially as a kind of member for pharmacy.

**PHARMACY IN MEXICO.**—The Mexican Government have decided to establish a school for medicine in the capital of the Republic. Signor Rio de la Loza maintains in the Mexican paper *La Farmacia* that this decision ought to be followed by the establishment of a State college of pharmacy, and points to the immense riches of the Republic in uninvestigated products of *materia medica* as affording an additional reason why such a college, with an efficient laboratory attached, should prove useful.

**PHARMACEUTICALS FOR A PORTUGUESE EXPEDITION.**—The Portuguese are sending out an expedition to their possessions on the African East coast, with a special eye to possible complications in Manica-land. The Lisbon Red Cross Society appeals through the pages of the *Jornal de Pharmacia* for donations of pharmaceutical requisites, and the editor of that journal is stirring up his readers to respond liberally to the appeal. So far the only contribution appears to have been a gift of 3 cwt. of saltpetre (!). What pharmaceutical purpose this can usefully serve on such an expedition we do not know.

**A NEW CURE FOR CONSUMPTION.**—Professor Liebreich of Berlin, claims to have found in the course of his investigations that a well-known substance, applied in a peculiar way, will cure laryngeal phthisis. This remedy has already been tested with good results in two clinics. The substance is injected under the skin, and neither produces fever nor endangers life. The substance has nothing to do with bacteria or the products of their assimilation. The comparative failure of Dr. Koch's medicine, which seems to be a growing belief, will not encourage the public enthusiasm in regard to other specifics.

**MILK-TESTING.**—The Dairy Association of Kiel offers a prize of 150*l.* (3,000*m.*) for an improved method for determining the fatty matter in new, skimmed, and butter milks, without the use of a chemical balance, as accurately as by the gravimetric process. It must be free from danger, cheap, and simple enough in execution to allow of comparative determinations of the fat in the milk of individual cows. Applications, marked with a motto and accompanied



with a sealed envelope containing the name and address of the sender, and with the apparatus required, may be addressed to Herr C. Boysen, Kiel, up to October 1, 1891.

**APOTHEKERS RETIRED FROM BUSINESS.**—Freiberg in Breisgau is described as the favourite resort for German apothekers who have amassed a competence and retired from business. Sixty-five such are said to have pitched their tents permanently in Freiberg, which is only a small place. Among these pharmacists *en villégiature*, there are many who have scarcely reached their fortieth year. This circumstance is seized by the socialistic Press to indulge in denunciations of the apotheker as one of the most dangerous parasites upon the body politic and to urge the claim for his "Verstaatlichung" or nationalisation, with redoubled energy.

**THE TRADE OF CHICAGO.**—In calling attention to the great "Columbian Exposition," which is the official title of the Chicago World's fair, the *Western Druggist* mentions that in 1850 the trade of the city amounted to \$20,000,000, and it was \$1,380,000,000 in 1890. The wholesale drug trade alone in the latter year reached a total value of \$7,100,000; while the trade in general chemicals, including paints, oils, glues, candles, &c., was nearly \$24,000,000. The city of Chicago is twenty-five miles in length and eight miles in width, the corporate limits embracing 185 square miles—the largest area of any municipal corporation in the world—and it has a population of 1,200,000.

**ALKALI MANUFACTURE IN RUSSIA.**—The Russian Chemical Society has received a communication, with a sample of the first output of Russian bleaching-powder, from P. K. Ushkoff, of Elabouga (province of Viatka), who has just started manufacturing bleaching-powder on a large scale from native products. This is considered a very important step in the growth of Russian chemical industry, as the whole of the bleaching-powder required for home industries—about 10,000 tons per annum—is now imported from England. The same manufacturer has nearly completed his arrangements for manufacturing soda ash and caustic soda by the Lehlanc process.

**A MOUNTAIN OF PURE SILICATES.**—A mineral discovery of unusual value is reported from Kamouraska, in Lower Canada. A Quebec correspondent states that an entire mountain has been found composed of silicates, otherwise known as vitrifiable stone, of a purity certified by the Provincial Engineer to average 98 per cent. This material is used for the manufacture of the finest glass, and is believed to exist nowhere else on the American continent in such purity. The Provincial Government has been asked by a deputation to guarantee 4 per cent. interest for ten years on 20,000*l.* if a local company subscribes that amount to develop the new industry, and has promised to consider the request if the principal municipality concerned is prepared to take a fair share of the risk.

**ALCOHOL IN THE ARTS AND MANUFACTURES IN THE STATES.**—Mr. Robert P. Porter, Superintendent of the United States census, has issued a report dealing with the American consumption of alcohol in the arts and manufactures, and for medicinal purposes. No precise figures could be obtained, but from estimates supplied by persons believed to be best capable of judging, from 5 to 6 millions proof gallons of "alcohol only," are annually employed for the purposes mentioned. "Distilled spirits" are treated separately from "alcohol only," the meaning of the division being by no means clear. On the consumption of such distilled spirits the estimates of experts vary from 6 to 15 millions of proof gallons, and all the Census Bureau can suggest is that from 15 to 20 per cent. of the total consumption of alcohol in the States—or, say, between 11 and 15 millions—is somewhere near the mark.

**A RAILWAY IN THE ORANGE FREE STATE.**—On December 17 last the Orange Free State celebrated the opening of its first railway line, from Norval's Point to Bloemfontein. The occasion marked an important day in the history of South Africa, and Mr. Rhodes, the Prime Minister of Cape Colony, with two of his colleagues, were the guests of the Free State authorities on the occasion. The capital of the Free State, which is thus brought into communication with the outer world by more modern vehicles than the post-chaise and the ox-waggon, is just 42 years old, and in

point of age the third place of the Republic. Last year the population of Bloemfontein was 2,017, mostly blacks. Two papers are published at Bloemfontein, one of which devotes to the railway inauguration a special "festival number," in which Dutch and English are amicably and interestingly blended, and the assertion is proudly made that Bloemfontein is to the Free State what Paris is to France—which nobody can deny. At Bloemfontein the inauguration festivities took the form of torchlight processions, public sports (one item of which is described as a "Kaffer truck wedloop"), fireworks, &c. Great things are expected by that city from the railway. Bloemfontein aspires to a high position among the health-resorts of the world, especially for patients suffering from chest complaints. The city lies at an altitude of 4,500 feet above the sea-level; it has a dry atmosphere and abundance of sunshine, and very few rainy days throughout the year. The occasional dust-storms, we are told, though they confine a patient to his room, are not of very frequent occurrence or long duration, and should certainly not be looked upon in the light of an unmitigated evil, for they prevent that stagnation of the atmosphere which is considered one of the drawbacks at Davos.

**OUR CONTINENTAL COMPETITORS IN BRAZIL.**—A curious example of the manner in which continental houses push their trade in Brazil is contributed through the *Rio News* by a local business house. It consists of a letter, alleged to be written in English, which the firm received from a European dealer in insect-powder. The missive runs as follows:—

I come to pray to you if you desire aquist of the "*Dalmatien Produkt Grisanteino Flower*" of which been produkt the *Insecticidas Pulver* used to preserve the manufacture or pelisse etc... of the some dangerouse insect and specialy: the *Louse* or *Milleped*.

I kan furnish you of the first qualitate gender at conveniently preece about 11-12-13 English Pound Sterling p. 100 Kgr. (one qte).

I kan furnish you of very good and of first qualitate "*Extracte Quintasentium "Rosmarinus officinalis,"*" whero was used for some misture in the *Chemick & Pharmaceutik* labour.

I have also of the "*Gripola*" of strouge Dalmatienische Wine of which used in the labour *Chemick & Pharmaceutik* misture. I kan give you those gender at very lower price.

When you desire aquist give me an order and I forward you at quickly as receiving you note.

I pray to give me the awknowledge in Where artikel you are okupied so as was awknowledging

I salute you, &c.

P.S. In the combination that you do not mater in those artikel please me to indicate me the names of the Commercialhouses which was doening about the opesonet gender.

In the hofuung of receiving a fowareble your replies,

I am, &c.

**BERLIN PHARMACEUTICAL SOCIETY.**—At the meeting of this society, held on February 5, there was an attendance of sixty-two members, and papers were read on the "Aleurone-Grains of Official Seeds," by Dr. Franz Lüdke; "Critical Observations on the New German Pharmacopœia," by Dr. B. Hirsch; on "Oleum Tiliæ," by Dr. Carl Müller; on the "Estimation of Caffeine," by Mr. Th. Waage; and on the "Purity of Glycerine," by Dr. E. Ritsert. The first paper dealt with the microscopic examination of twenty-five different kinds of seeds familiar in pharmacy; the results showing the situation of aleurone grains and starch grains were tabulated. Amongst the seeds examined in which the grains were found were those of *arica catechu*, *ficus carica*, *nigella sativa*, *sinapis alba*, *brassica nigra*, *strychnos nux vomica*, *strophanthus hispidus*, and *citrullus colocynthis*. Generally speaking, the aleurone grains are in the innermost part of the seed. *Oleum tiliæ*, the subject of Dr. Müller's paper, is the fixed oil obtained from *Tilia parvifolia*, Ehrh. var. *intermedia* D.C., the common lime tree, the seeds of which yield 58 per cent. of the oil. The colour and taste of this oil are similar to those of the best olive, and it is free from bitterness and aromatic odour. It is able to stand a very low temperature without freezing. Dr. Müller exposed a sample of it in a mixture of salt and snow (temperature — 21.5° C), and it did not solidify. Although the oil is not altogether new, having been known at least 100 years ago, its properties, and the large quantities of it available, seem to merit for it more attention. Mr. Waage, in his paper on the "Estimation of Caffeine," criticised Paul and Cowley's method, and others, and gave



preference to the following, which is a modification of Mulder's method, which gives the caffeine in a purer state than the former:—Ten grains of tea are exhausted by four boilings of water, and the decoctions evaporated to a syrupy consistence. To this 2 grains of magnesia and 5 grains of sand are added, and the mixture dried. It is then introduced into a Soxhlet's apparatus, the lower part of the percolator being filled with Swedish filter paper, covered with asbestos paper. The material is placed on this and covered with asbestos paper. Chloroform, free from alcohol and water, is used for exhausting the material. The alkaloid obtained is practically pure. The following are some of the results obtained by the two methods:—

	Waage Mulder method	Paul-Cownley method	Difference
	Per cent.	Per cent.	Per cent.
Broken Pekoe ..	2.93	3.41	0.43
Pekoe .. ..	2.29	2.65	0.36
Pekoe souchong ..	2.32	2.61	0.29

It is highly important that chloroform, free from water and alcohol should be used, otherwise the results come out high. At the close of the meeting Mr. H. Thoms called attention to a new patent insect-powder, which, according to the specification, consists of zinc-dust and carbonate of magnesia, but, on examination, he found in it from 12 to 17 per cent. of ordinary insect-powder.

#### FRENCH PHARMACEUTICAL NEWS.

(From our Paris Correspondent.)

THE ACADEMY OF MEDICINE has received 20,000f. under the will of the late Mme. Hédouin. This sum is to be applied to furthering the study of mental diseases. It is intended to found a biennial prize, to be awarded to the medical man who writes the best work, or who obtains the best results, in this direction.

A DRAMATIC ACCIDENT occurred last Sunday in the neighbourhood of Marseilles. M. Lombard, director of the Rio Tinto Chemical Works, had invited a few friends to pass the day at his country house, and his son, a youth of 17, mounted a horse for their amusement. The animal threw the poor fellow, who was killed on the spot. The father's back was turned at the time of the accident, but when, attracted by the noise, he hastened to the scene and found the victim to be his son, he attempted to commit suicide, so great was his grief. Fortunately he was prevented from so doing.

PHOTOGRAPHING IN COLOURS.—At the last meeting of the Academy of Sciences, M. Becquerel referred to the paper read on this subject by Professor Lippmann at a previous assembly of the Academy, as mentioned in last week's CHEMIST AND DRUGGIST. M. Becquerel says he obtained proofs forty years ago, by another process, in every way equal to those of M. Lippmann. Although not fixed, these proofs were stated to be still in a perfect state of preservation. M. Becquerel submitted a series of negatives obtained by him long ago. These plates, though not fixed, resist diffused light admirably. In a full light the colours are lost.

A TOWN RESPONSIBLE FOR ITS MUSHROOMS.—In a small market-town near Carcassonne, a family having been made dangerously sick by poisonous mushrooms purchased in the market, began a suit for damages against the town corporation, as responsible for the carelessness of the market-inspector acting as its official agent. After some preliminary skirmishing, the facts not being denied, the case came up before the Carcassonne tribunal on a question of law, namely, whether the town was responsible or not for the market-inspector's doings. The court held that it is the mayor's duty to see to the public health, and to have proper inspectors for watching over the good quality of the articles of

food offered for sale in the markets; that the market-inspector in question, being an official agent paid by the town, stands as its legal representative; consequently the town is responsible for all damages resulting from its agent's neglect.

PRECAUTIONARY MEASURES FOR DENTISTS.—At the last meeting of the Committee of Hygiene of the Seine, M. Lancereaux's report upon precautionary measures to be observed by dentists as a means of preventing the transmission of contagious diseases was brought up. Dr. Dujardin-Beaumetz inquired what authority could be attached to the conclusions of the report. Dr. Proust replied that they simply took the form of advice. The general secretary, M. Lépine, proposed to summarise the report. Evidently, he said, it could not be a question of inflicting penalties on offenders, or of excising coercion upon them, or of compelling them to observe these recommendations by means of police supervision. The authority exists solely in the terms of the Article 1,383 of the Civil Code, which declares that: "Everyone is responsible for the harm which he may cause, not only by his acts, but also by his negligence or his imprudence." Dentists, aurists, &c., who, by neglecting to follow the reasonable cautions given by the Committee of Hygiene, communicate a contagious malady to clients, commit a culpable imprudence. The report is to be discussed further.

HENRY'S "OLFACTOMÈTRE."—At the last meeting of the Académie des Sciences Perpetual Secretary Berthelot showed a new instrument called "Olfactomètre" by the inventor, M. Charles Henry. The object of the apparatus is to determine the minimum weight of odoriferous vapour per cubic centimetre of atmospheric air perceptible to the human olfactory nerves. The olfactomètre consists principally of a graduated glass tube which moves within a paper envelope. The tube is held to the nose and the paper gradually withdrawn. As soon as the subject of the experiment perceives the odour of the material contained within the glass tube, the latter is withdrawn and the quantity of vapour which has escaped is calculated from the known capacity of the tube, and the degree marked by the paper envelope. The cubic space affected by the odorous vapour is simultaneously determined by means of a small areometer. The inventor of the instrument shows that the perceptibility of different odours by different subjects varies enormously, the two limits of his experiments falling between two milligrammes of ether per cubic centimetre, and one-thousandth of a milligramme of oil of wintergreen per cubic centimetre.

COLOURS FOR FOODS.—In accordance with the Council of Hygiene's advice the Prefect of Police has issued new regulations somewhat modifying those hitherto enforced respecting the use of colouring matters for articles of food. The following pigments are prohibited in all articles of food. Copper, lead, arsenic, and mercurial compounds of all kinds; also baryta chromate, yellow ultramarine, gamboge, and alkanet. The following may not be used in ordinary articles of food:—Coal-tar colours, such as fuchsine, Lyons blue, flavaniline, methylin blue, phthaleine, and their derivatives; eosine, erythrosine, naphthol yellow, Victoria yellow, diazoic compounds, tropæolines, scyldines. But for colouring candies, liqueurs, ices, &c., the following may be tolerated in very small proportions: Pinks: eosine, erythrosine, Bengal rose, phloxin, Bordeaux red, ponceau, and fuchsine, prepared without arsenic (Couper's process). Yellows: sulpho-conjugated derivatives of naphthol. Blues: Lyons blue, light blue, Couper's blue, all triphenyl rosaniline, or diphenylamide derivatives. Greens: All mixtures of the yellows and blues given above; also malachite green (hydrochloric ether of tetramethyldiamidetriphenylcarbinol). Purples: Paris violet or methylaniline. No pigments of the first group may be used for colouring any boxes, wrappers, or cases which are to come in contact with articles of food. Tin foil used for wrapping articles of food may not contain more than one half of 1 per cent. of lead, or more than 1 per 10,000 of arsenic. The metal used for tinning copper and other utensils must be of similar purity. Pewter implements, such as pots or measures employed in connection with food articles, may not contain more than 10 per cent. of lead and 1 per 10,000 of arsenic.



## Pharmaceutical Society of Great Britain

## NORTH BRITISH BRANCH.

THE third evening meeting of the present session was held at 36 York Place on Wednesday, Mr. Wm. Gilmour, F.R.S.E., chairman of the executive, presiding. There was an excellent attendance. The first business was

## A DISCUSSION ON THE B.P. ADDITIONS,

adjourned from the last meeting, and now resumed by Mr. GEORGE COULL, B.Sc., who at the outset said that acetum ipecac. can be made better by maceration than by the B.P. process, and he also complained that the powder is ordered too fine. Of menthol-plaster he said that no temperature is given at which it should be made, but he found that adding the menthol at 65° to 70° C. is the best for ensuring the retention of the acting ingredient. He also complained that the dose of ext. hamamelidis is too small. The United States extract is nearly of the same strength, and is given in half-drachm doses. He had failed to produce a good castor-oil mixture by following the B.P. directions. The granular preparations he had found good, but a little more sugar might improve the taste. In the granular sulphate of magnesia there was rather too much moisture left and too much citric acid. Mr. Coull also spoke about the glycerine suppositories, which, he said, were very good. He suggested that the syrup of subchloride of iron should be standardised, and questioned if the strophanthus was exhausted by the 10 oz. of spirit directed to be used by the Addendum for percolation.

Mr. RUTHERFORD HILL was the next speaker. Commenting upon the Red Gum, he said that the characters given were "tests" rather than "characters." He showed a number of specimens of gelatine and preparations made with them, and maintained that the characters given in the Addendum were sufficient to exclude the inferior varieties. He thought the boiling of the distilled water for preparing the solution of cocaine to be unnecessary, especially when a preservative was used, and he suggested that there should be an official salicylic-acid water for general use in the preparation of such solutions. Attention was called to the statement in Dr. Stockman's book that trinitrin is a nitrite of glyceryl, not a nitrate, as it is generally supposed. The formula for picrotoxin is also given there, although not in the Addendum. This body is considered by some to be a glucoside. Mr. Hill thought that it would be a great advantage if the B.P. would give the actual iron-strength of all the preparations of that metal, and concluded by advocating that the oil should be pressed, and not washed, out of strophanthus seeds.

Mr. ADAM GIBSON, considered that the whole book was very satisfactory. He had had no difficulty in making the castor oil mixture; there was not too much lemon in it, and the potash probably modified the acidity of the oil. He had found the formulae for the granular preparations quite satisfactory, and agreed with the previous speaker that it would be better to press the strophanthus seed. He was sure that the ether extracted some of the active principle. The 10 oz. of spirit did not exhaust the seeds, it was necessary to continue percolation longer than the Addendum directed.

Mr. PETER BOA did not agree with Mr. Hill regarding the uselessness of boiling the water for the cocaine solution. His own experience was that it was an advantage.

Mr. DANIEL GORRIE thought that tartaric was preferable to acetic acid for the extraction of ipecacuanha.

Mr. CHARLES ARTHUR, speaking of adeps laneæ, said he had found commercial wool fat to differ materially from lanoline, and it was important, he added, that buyers should note this. He showed a spread menthol plaster, and remarked that it was an excellent preparation. Salicylic acid was not a good thing to use as a preservative for cocain solution, as it coloured instruments which were used with it. Boric acid was generally used in Edinburgh, and was much better for the purpose. He also showed a specimen of castor oil mixture, made by the official process, which was very good indeed. He reminded those who had spoken about strophanthus that Professor Fraser said that 10 oz. of spirit exhausted the seeds, and that anhydrous

ether did not extract any of the active principle. He had generally obtained 3 oz. of oil from 8 oz. of seeds. The glycerine suppositories were good, in his opinion, but the name for the ferrous chloride syrup was a mistake; it should have been *syrupus ferri proto-chloride*.

Mr. WILLIAM DUNCAN agreed with Mr. Gibson that the Addendum was as near perfection as they could expect. He supposed that the boiling water was ordered for the cocaine solution in order to dissolve the salicylic acid, which did not dissolve in the cold.\* He had seen a statement that this acid decomposed cocaine.

The CHAIRMAN, in closing the discussion, expressed his satisfaction that it had been of so practical a nature.

Mr. DANIEL GORRIE was then called upon to read a paper on

## LIQUOR BISMUTHI ET AMMONII CITRATIS.

He said that the new liquor is superior to the old in three respects, and worse in two. As to the improvements they are the absence of ammonium nitrate; the citrate, like other bismuth salts, is made from a purer metal, and the preparation is more easily made. The first objection to the liquor is that it does not keep well, and the second that it has a slight tinge of colour. The liquor decomposes, becomes muddy, and a fungoid growth develops in it. To prevent this he had found the addition of 1 oz. of rectified spirit to the pint perfectly satisfactory. As there is chemical action when the solution of ammonia is added to the bismuth citrate he had found it advantageous to mix them gradually only, allowing the mixture to cool between the additions.

Mr. BOA said that the liquor does not develop a fungus if recently-distilled water, or distilled water recently boiled, is used in making it, and he saw no reason why it should not keep.

Mr. DUNCAN thought that 1 oz. of rectified spirit to 1 pint seemed a very small quantity for preservation.

Mr. ARTHUR attributed the coloration of the liquor to filtering through grey filter-paper. It was not coloured when white paper was used.

The ASSISTANT-SECRETARY called attention to recent additions to the museum, which were exhibited, and this concluded the proceedings.

## THE SOCIETY OF CHEMICAL INDUSTRY.

A MEETING of the London section was held at Burlington House on Monday evening, February 16, Mr. Crowther presiding, in the absence of Mr. Thos. Tyrer, the chairman of the section. Mr. W. Mackean read a paper on

## INCANDESCENT GAS LIGHTING.

Mr. MACKEAN said the question of lighting had of late attracted a great deal of attention, more so because of the progress made in electric lighting. The high price of electric lighting compared with coal-gas gave the latter such an advantage as to almost defy competition for house illumination. The production of light for illuminating purposes by the use of platinum and iridium was not entirely new, but its adoption for ordinary household purposes had only lately met with any amount of success. He desired to refer especially to the Welsbach system. The lecturer here showed specimens of large cone-shaped burners resembling white gauze, and which, when submitted to the flame produced by ordinary coal-gas became incandescent, emitting an intense white light, which illuminated very brilliantly the front part of the lecture-room. In this process, he explained, the cotton-thread net material—of which the cone-shaped mantle of the burner is formed—is made by first washing in a solution of certain salts, then in dilute hydrochloric acid, and then in distilled water. It is then attached by means of a small platinum wire which is passed through the top

\* While on this subject it may not be too late to point out that the Addendum is perfectly consistent in the formula for liquor cocaine hydrochloratis. Distilled water is ordered sufficient to produce the 6 drachms of liquor; it is ordered to be boiled, and there is no indication in the formula that any other water is to be used.—ED D.



part of the mantle, and the flame of a Bunsen burner is applied for about three hours so as to ensure thorough reduction of the salts which now take the place of the fibre gauze and form the mantle. By altering the nature of the dipping fluid used, the colour of the light may be changed. The duration of the illuminating power of the mantles varies considerably, and it is a curious fact in this relation that the diminution of light given after 500 hours is very gradual, and the light is very much whiter than at first. The following figures show the total difference after 1,000 hours in the case of light which at first was of 23.2-candle power:—

After 100 hours	22	candle power.
" 200 "	21.4	"
" 500 "	17	"
" 700 "	16	"
" 800 "	16	"
" 1,000 "	16	"

Another burner showed:—

After 200 hours	19.2	candle power.
" 300 "	18	"
" 400 "	18	"
" 1,000 "	18	"

It thus appears that, although some lights remain very steady from 200 up to 1,000 hours, others differ very much. An excess of cerium is very detrimental. Thus, a burner which originally gave 25-candle power with  $2\frac{1}{2}$  cubic feet of gas showed a loss of 43 per cent. Now, this burner was made from a solution containing  $\frac{1}{4}$  per cent. of cerium, and, on adding  $\frac{1}{2}$  per cent. more, the illuminating power was reduced to 17.8 candles; and, on a further addition of 1 per cent., it was reduced to 13.2. Mantles which give a yellow-tinted light have a more diffusive power than those producing a white colour. The illuminating power of the oxides by which the mantles are prepared differs considerably. Thus, lanthanum oxide is found to have an illuminating power of 23.5 candles with an intense light; zirconium, 12.2, and a very white light; thorium, a very easy oxide to work with, has a power of 25, and gives a bluish-white light. Iridium's power is 19.8, with a yellowish light; and cerium, 4-candle power, giving a nearly red light, with absolutely no diffusion from it. The highest illuminating power which Mr. Mackean has obtained is from a mixture of 60 per cent. thorium oxide and 30 per cent. iridium, this giving an illuminating power of 40 candles with 3 cubic feet of gas. There must be perfect combustion of the gas if the light is to be good. Mr. Mackean subsequently referred to the Clamond system, in which a magnesia cone is employed, with an illuminating power, with 6 cubic feet of gas, of about 30 candles. Reference was also made to the Lewis light, in which a small cone is placed over a Bunsen burner and air forced through it under pressure, thus obtaining a higher temperature. This light is suited chiefly for large buildings. It is imperative, the lecturer thought, that any system should be such that it may be adapted to utilise existing fittings, except so far as the burner is concerned, and that the light can be attended to by unskilled labour.

A brief discussion followed, and, before it, the chairman called upon Mr. Seudder to show an experiment with

#### A WATER-GAS BURNER,

which he had on the table.

Mr. SCUDDER said his experiments had not gone so far as to enable him to give full results. He had investigated water-gas in America, and whilst there he had come across the Fahrjeon cone, though slightly different from the cone used in England, which was made at Essen, Germany. Upon investigation he found that these cones in America underwent a second treatment. The cone consisted of a number of needles of pure magnesia, and gave an intense white light. The Americans dipped the cone in a solution of chromate of potash, allowed it to dry, and then ignited it; this gave higher diffusive and illuminating power. The German cone deteriorated: burnt at the rate of 5 cubic feet per hour, it would only last 100 hours; the American cone would burn at least 150 hours at the rate of 5 cubic feet per hour.

Mr. BERNARD DYER, referring to Mr. Mackean's paper, said he was under the impression that many of the metals whose oxides were employed in the construction of the lamps were not only little known, but really rare. He

thought it would be of interest if Mr. Mackean would give some information as to the source of the oxides and how they were obtained in commercial quantities. He should like also to hear something about the chemical changes to which the deterioration of the light was due. He felt interested because he had tried the lights in his laboratory some years ago, but with little success. He thought perhaps the fumes of the laboratory would affect the course of deterioration.

Mr. ANDERSON asked if the oxides would not in time be reduced to the metallic condition by being subjected to the reducing flame instead of the oxidising flame of the Bunsen burner.

Mr. ALLEN asked if the rare oxides used, after being kept for so long a time as 1,000 hours at a white heat, would not pass into an entirely insoluble state, or if it were not so, would it not be very easy to re-dissolve them in nitric acid?

Mr. MORRISON confirmed Mr. Mackean's results with regard to the illuminating power of the Welsbach system. He had obtained 28 and 29 candles illuminating power with  $2\frac{1}{2}$  cubic feet of gas. He had also obtained the same results burning  $1\frac{1}{2}$  cubic foot in some of the smaller towns of Scotland, where the gas was very much richer. He had used the system for titrating purposes with considerable success, and thought also it would be a very great advantage in the analysis of sugar.

Mr. DAVID HOWARD said the subject was one of the deepest interest and he hoped the matter of diffusibility of the light would be followed up.

Mr. MACKEAN, in reply, said among the metals he had used were monosite, which was obtained from Norway. Zirconium came from America, and could be obtained at 2s. per lb. Thorium was obtained in Norway, and was at first charged for at the enormous rate of 17. 1s. per oz., but they now got it at 20s. per lb. As to the oxides being reduced to a metallic state, that was almost impossible. The volumetric power of the mantles was 8 to 10 candles per cubic foot. The variability of the diminution in the different mantles was entirely unaccountable. He also stated that the oxides are recovered from mantles by treatment with ammonium chloride. The next paper was one by Messrs. Cross and Bevan on the

#### VOLUMETRIC ESTIMATION OF ALUMINA.

Mr. CROSS read this paper, which was chiefly controversial, the authors disputing with Professor Lunge. The point at issue was as to the use of the indicators, methyl-orange, and phenol-phthalein. The substance under examination is boiled with an excess of sulphuric acid and titrated back with standard soda solution. Lunge does not think methyl-orange a good indicator, and prefers phenol-phthalein, but the authors of the present paper submitted results to show that they agree closely with the gravimetric process. In the discussion several well-known analysts took part, and the general opinion was that methyl-orange can be relied upon if it is the real thing, and is used in sufficiently dilute solution.

The last paper was on the

#### "ESTIMATION OF GLYCERINE BY ALKALINE PERMANGANATE."

In this the author, Dr. WILLIAM JOHNSTONE, retracted his previous statement to the effect that he had no difficulty in obtaining a theoretical quantity of glycerine from a butter-fat by means of Benedict and Zsigmondy's process. The statement was really due to the inaccuracy of the process, which he had accepted as correct on good authority, including Mr. A. H. Allen. The process is this:—The fat is first saponified, then treated with alkaline permanganate, and it is supposed that oxalic acid is the result. By suitable means the oxalic acid is precipitated as a calcium salt, and from the weight of this the original amount of glycerine is calculated. Dr. Johnstone has found, however, that the process is by no means satisfactory for estimating glycerine in the presence of other bodies, such as are derivable from fats, although it may be reliable in the case of more or less pure glycerine. In other respects the note was a controversial one as regards a dispute between the author and Mr. Wanklyn.

Mr. ALLEN said he had taken definite amounts of glycerine, and succeeded in obtaining the theoretical quantity of oxalic



acid. With respect to the matter as related to butyric acid, Mr. Allen suggested that what Dr. Johnstone had been working with was iso-butyric acid.

After a few more remarks on this subject the proceedings concluded.

#### MIDLAND COUNTIES CHEMISTS' ASSOCIATION.

A MEETING of the Midland Counties Chemists' Association was held on Tuesday night at the Mason College, Birmingham. Mr. A. Southall presided, and there was a fairly large attendance.

##### TINCTURA QUININÆ AMMONIATA.

Mr. H. D. ADCOCK, of Leicester, read a paper on this subject, his comments being based on a reference to Mr. George Lunan's formula. Mr. Adcock said that by rubbing down the sulphate of quinine in a mortar before adding the proof spirit, he has found but little difficulty in making the official tincture without heat; but the following is a process easy of manipulation, requiring only ordinary care, and it is perfect in results:—

Sulphate of quinine .. ..	160 grains
Solution of ammonia .. ..	2½ fl. oz.
Rectified spirit .. ..	3xi. and m105
Water to .. ..	20 fl. oz.

Rub down the quinine in a glass mortar to fine powder, add the rectified spirit, and stir; now add the solution of ammonia, then the water in such quantities that any turbidity caused by each portion disappears before adding more; filter or, where practicable (as shown by Mr. Lothian) allow to stand four days and filter from the deposit.

The resulting tincture is in accordance with the requirements of the Pharmacopœia, the *seeming* extra spirit being necessary to allow for the contraction in volume of spirit and water when mixed.

The CHAIRMAN thought that no difficulty was experienced in making the preparation except that in cold weather the salt sometimes crystallised out.

Mr. PERRY said he had found no difficulty in making the preparation. He used moderate heat in a flask, and did not quite see the advantage of Mr. Adcock's method.

Mr. GIBSON (Wolverhampton) considered that, if the spirit was of full strength, and good materials were used, the preparation was a success, but that no heat was required.

Mr. CRIPPS believed it was a mistake to recommend heat in making the preparation, and fancied that this recommendation was a relic of the time when quinine was not so pure as it is now. The presence of cinchonidine would interfere with its proper preparation.

Mr. LOWTHER had had no difficulty in making it, but had not rubbed down the preparations in the mortar at all. He simply placed all the ingredients in a stopper bottle, and shook up.

Mr. ADCOCK said that during the influenza epidemic of last year much of the preparation was used, and he himself had found great variations in the flavour of it. This was no doubt due to the varying strengths and qualities of the ammonia. A very nice preparation resulted if the pure form of ammonia, known as volcanic, was employed. He also stated that, mixed with an equal quantity of brandy, it was an admirable remedy for influenza.

Mr. ADCOCK, replying to the observations, said he had not found any difficulty in making the preparation, but he had explained at the beginning of his notes why he had presumed to bring the subject forward.

In the absence of Mr. A. E. Robertson, F.C.S., who was to have read a paper on "The Chemistry of the B.P. Addendum, 1890," Mr. John Barclay, B.Sc., contributed some notes on "The Respiration of Plants." A discussion followed, in which the President, Mr. Cripps, and Mr. Adcock took part.

A NEW WAY OF MOULDING SOAP has been patented by Mr. P. H. Newton, of the Chesebrough Manufacturing Company, the object being to insure perfect homogeneity. This is done by cutting and compressing the cakes in one operation.

#### Personalities.

MR. W. P. WILSON, an old pupil of Mr. Watt, Haddington, is commencing business on his own account at Dunbar.

MR. JOHN MOSS's son Harold has passed the Matriculation examination of the London University, science being the object aimed at.

THE business carried on by Mr. Geo. H. Lear, of 337 Coventry Road, Small Heath, for the last twenty-five years has been purchased by Mr. Geo. H. Brnnt, chemist, of Bordesly Green.

MR. ALBERT FUERST, of the firm of Fuerst Bros., drug merchants, 17 Philpot Lane, E.C., left for New York last Wednesday by the s.s. *Majestic*, to manage the American branch office of the firm.

#### NEW COMPANIES.

CAUSTIC SODA AND CHLORINE SYNDICATE (LIMITED).—Capital, 15,000*l.*, in 1*l.* shares. Object: to carry on the business of producers and manufacturers of caustic soda and chlorine. The first subscribers are:—Otto F. Oncot, Muswell Hill, gentleman; Wm. B. Nicholson, Croydon Road, Anerley, gentleman; H. E. Walter, Murray Street, New York, gentleman; G. F. Griffin, Mandeville Place, W., civil engineer; C. O. Greenwell, 58 Lombard Street, E.C., secretary; A. T. Salisbury-Jones, 54 Gloucester Street, S.W., gentleman; John J. Dale, Augustus Road, Hammersmith, gentleman. The first directors (four in number) are to be appointed by the subscribers at a remuneration of 100*l.* per annum.

HERBERT POTTER (LIMITED).—Capital, 2,500*l.*, in 500 shares of 5*l.* each. Object: to carry on the business of chemist and druggist, patent-medicine vendor, &c., hitherto carried on by the said H. Potter at 8 Park Terrace, Sutton, Surrey. The first subscribers are:—Alfred Rumelly, 14 Duke Street, E.C., merchant; Richard Rumelly, Romford, E., traveller; Emile Reyns, Navarino Road, N.E., traveller; F. W. Blanck, 11 Balmoral Terrace, Forest Gate, E., traveller; John M. McEwen, 37 Walbrook, E.C., secretary to public company; W. H. Stanford, 25 Bucklersbury, solicitor's clerk; A. H. Greenhill, 31 Belsize Crescent, Hampstead, clerk to a company. Registered without articles of association. The registered office is 14 Duke Street, E.C.

EDDOWES & Co.—Capital, 7,000*l.*, in 1*l.* shares. Object: to acquire and carry on the business of aerated-water manufacturers, &c., hitherto carried on by Alfred Eddowes, Scotland Road Works, Warrington. The first subscribers are:—Alfred Eddowes, Scotland Road, Warrington, mineral-water manufacturer; George Wright, Ryland Street, Warrington, licensed victualler; Frank Toft, Froghall Lane, Warrington, chemist; Wm. Fairhurst, Aubrey House, Latchford, corn merchant; Charles Holland, Rolleston Street, Warrington, wine and spirit merchant; Richard Toft, Horse-market Street, Warrington, tobaccoist; W. J. Forshaw, King Street, Warrington, solicitor. The first directors are Alfred Eddowes, Chas. Holland, and George Wright. The registered office of the company is Scotland Road, Warrington.

A. O. S. SYNDICATE (LIMITED).—Capital 10,000*l.* in 1*l.* shares. Object: to carry on the business of chemical manufacturers, brokers or merchants, &c. The first subscribers are:—Charles Luff, Farncombe, Godalming, cashier; R. T. Strongman, 101 Leadenhall Street, secretary to a company; A. McLean, Stonor Road, Kensington, manufacturer; William Walkinshaw, 15 St. James Terrace, N.W., merchant; F. W. Homan, 16 Hortham Road, Holloway, N., accountant; Norman Tronson, 8 Drapers Gardens, E.C., merchant; Percy R. Stampcr, Rebecca Terrace, Gomm Road, S.E., solicitor's clerk. The directors may be appointed by the above subscribers at a remuneration of 250*l.*, to be divided among them. The registered office of the company is at 8 Drapers Gardens, Throgmorton Street, E.C.

A CONTRACT FOR CHEMICALS is advertised in this issue by the Lambeth Vestry, who require disinfectants, bleaching-powder, and some other articles.





## Legal Reports.

BEECHAM v. TURTON.

IN the Chancery Division of the High Court of Justice, before Mr. Justice Romer, on Friday, February 13, an action was brought by Thomas and Joseph Beecham, trading as

"Thomas Beecham," against William Turton.

The plaintiffs were the proprietors of "Beecham's pills," and carry on the manufacture and sale of them at St. Helens, in Lancashire. The defendant was a traveller for a wholesale confectioner, named Watmough, at Nottingham, and it was alleged against him that in the course of his travelling he was in the habit of soliciting orders from and supplying goods to grocers, general dealers, and others, carrying on retail business at Derby, Loughborough and other towns in the midland counties, and of selling pills to customers as Beecham's pills, which were not of the plaintiffs' manufacture. The action was accordingly brought to restrain the defendant by injunction from selling as "Beecham's pills," or "Beecham's patent pills," pills not manufactured by the plaintiffs, or offering for sale pills which were colourable imitations of Beecham's; for delivery to the plaintiffs of boxes, labels, &c., constituting colourable imitations; for damages, and an inquiry.

Mr. Haldane, Q.C., and Mr. Eve were for the plaintiffs, and Mr. J. E. Fox for the defendant.

The plaintiffs called several witnesses to prove their case. The defendant only was called to deny their statements. At the conclusion of his evidence, his lordship stated that he disbelieved him, and believed the plaintiffs' witnesses. The defendant's counsel having addressed the court,

Mr. Justice Romer, in giving judgment, said he would not repeat what he had already stated as to his view of the evidence. This was a clear case of fraudulent sale by the defendant of pills, as Beecham's pills, which were not manufactured by them. There must be an injunction to restrain him from selling as Beecham's pills, or Beecham's patent pills, any pills not manufactured by the plaintiffs. There must also be an inquiry as to damages, and the defendant must pay the costs of the action, except those of the inquiry, which must be reserved.

### PENALTIES UNDER THE PHARMACY ACT.

AT the Romford County Court, on Friday, February 13, before Judge Aaby, the Pharmaceutical Society sought to recover from Mrs. Mary Ann Price, of East Street, Barking, Essex, two penalties of 5*l.* each for selling or keeping open shop for the retailing, dispensing, and compounding of poison, and for taking, using, or exhibiting the name or title of chemist, contrary to the provisions of the Pharmacy Act of 1868.

Mr. Grainger appeared for the Society, and Mr. Martelli for the defendant.

Mr. Grainger, said there were offences committed at two other shops, but the Society only asked for penalties in one case. The defendant was not registered as a pharmaceutical chemist under the Act. She was the wife of a man who was a registered chemist, but they separated, and the husband went to Arundel, and kept a shop there. There were three businesses which they submitted were under the control of the defendant. One was at King David Lane, Shadwell, another at East Street, Barking, and the third in the Broadway, Barking. He should show that when the defendant and her husband separated the lease of the premises in East Street, Barking, was made over to Mrs. Price, the business

was carried on by her, and the husband had nothing to do with it. He should also prove that poisons were sold. As to the other two shops at Barking and Shadwell, he would prove that after the defendant had been communicated with these two businesses were turned into a company, and this was merely to escape from the consequences of the offences committed.

J. W. Hobbs, house porter at 17 Bloomsbury Square, proved that in November he went to the shop in King David Lane, Shadwell, and purchased, among other articles, a small quantity of laudanum in the bottle produced. He handed the laudanum to the analyst of the Pharmaceutical Society.

In cross-examination he said, he was served by a man whose name he had since learned was Hampshire. He saw no other person in the shop, but he heard Hampshire speak to somebody—he thought a female—who was behind the screen. A young fellow about 19 served him at the shop in the Broadway, Barking.

Mrs. Yallop, of East Street, Barking, proved the purchase of some laudanum at the shop in East Street. She was served by Mr. Northwood.

Thomas Price, a registered chemist, carrying on business at Arundel, said he had been separated from his wife about three years. He had opened the chemist's shop in East Street, Barking, about three weeks when he separated from his wife, and when he left he requested the landlord to make over the lease to his wife. This was done, and he had nothing to do with the business after that. His stepson, Mr. Northwood, purchased the stock and fixtures, and he was to carry on the business.

Mr. Grainger: Was not your wife the proprietress of that business?

The Witness: Certainly not. Mr. Northwood, my stepson.

His Honour: Do you say that after looking at the label on this laudanum-bottle, "Price & Co., Manufacturing Chemists?"

Mr. Grainger: Do you say after this that your wife did not carry on that business?

Witness: I say certainly not.

His Honour: Who did? Northwood?

Witness: Yes, to the best of my knowledge. Northwood not being a registered chemist, he asked to use the name of "Price & Co."

Mr. Grainger: Do you say you assisted him in evading what you knew to be the Act?

The Witness: No; I purchased the business at Shadwell for my stepson. I had nothing to do with the business in the Broadway, Barking. I assigned the Shadwell business to my stepson about the beginning of 1889.

Mr. Grainger: Did you lend him your name to carry on this illegal business?

The Witness: I did not know there was anything illegal in that.

In cross-examination the witness said it was a common thing for businesses to be carried on under the original name.

His Honour: But the following of the name is one thing, and compliance with the Act is another.

In further cross-examination Mr. Price said he was unable to pay the landlord, and Mr. Northwood paid 242*l.*, which he (Mr. Price) accepted in payment for the stock and fixtures.

Mr. Samuel Hayden produced the register relating to the limited company of Mayden & Co., registered on January 1, 1891, the document setting forth that the company was formed for the purpose of taking over and carrying on as a going concern the businesses now carried on by Mrs. Mary Ann Price, at Shadwell, and Broadway, Barking. The capital was 1000 shares of 1*l.*, and over 600 were taken by Mrs. Price, over 300 by Mr. Hampshire, and only 5 by other persons.

Mrs. Price, the defendant, said she had not kept a shop for the sale of poisons at any of the three places. She never used the name or title of chemist. The business belonged to her son, who bought it of his stepfather for 600*l.* Her husband gave up the business because he could not pay the landlord, and her son paid it. The lease of the East Street shop was assigned to her, but her son paid the rent. She had nothing to do with the business. Her son bought the Broadway business of Mr. Barry, chemist, of North



Woolwich. Her son turned the business into a company, and gave her the 600 shares.

Mr. Northwood said he bought the Shadwell business of his stepfather, paying 200*l.* down, and the remainder in instalments. He had the East Street business in consideration of the payment of 242*l.* to the landlord. He was not registered, but employed qualified assistants. He now knew he had infringed the Act.

Mr. Grainger: What was the object of turning this into a company?—I knew I was infringing the Act. I learned that in consequence of the inquiries the Society were making about the business of "Price & Co.," and I took legal advice. Mrs. Price's name appeared in the proceedings because I wished her to have the shares. My name did not appear, as I thought I would protect myself against the Pharmaceutical Society, and against creditors.

Mr. Martelli then addressed the court for the defence, submitting that Mrs. Price was merely the trustee for Mr. Northwood of the lease of the premises.

His Honour: That may be all very well; but the public might be poisoned right and left, and she might say, "I am only trustee."

Mr. Martelli said Mr. Northwood might be liable to proceedings, and his suggestion was that the wrong person had been brought before the court. If the title of chemist was used by anyone in contravention of the Act it was by Northwood. The only evidence against Mrs. Price was in the articles of association.

Without calling upon Mr. Grainger for a reply, his honour proceeded to give judgment. He said, the question was whether Mrs. Price was carrying on this business, knew it was being carried on, and whether the things were sold under these conditions. He was satisfied from the evidence of Mrs. Price, Mr. Price, and Mr. Northwood, that these facts really did exist, that it was all a sham that Northwood was carrying on the business, and that she was carrying on the business for her own sake, and knew all that was going on at all these three places. The labels on the bottles held out the business to the public as that of "Price & Co.," but Price himself went entirely out of the business, and the name, as far as he was concerned, had disappeared. If Northwood stepped in in his place, why did he not assume the name? "Northwood, late Price & Co." would have been an intimation to the public, and they would have been informed that the real owner was Northwood. But in the articles of association the name of Mrs. Price appears as transferring the business to the company. It was obviously the intention of Mrs. Price to induce other people to believe she had the title to the property and was conveying from herself to them and had shares in it as the late proprietor. The Act of Parliament was for the benefit of the public, and it was most important that its provisions should be enforced. He said Mrs. Price was "Price & Co.," and he imposed the penalties asked for.

Mr. Grainger asked for costs upon the higher scale, and his honour granted this, observing that the case was one which concerned the whole public.

#### CHEMICAL BROKERS' BANKRUPTCY.

IN the Queen's Bench Division on Monday, the case of *in re Tobias & Co., ex parte H. A. Tobias*, came before Justices Cave and Williams sitting as a Divisional Court; H. A. Tobias appealing against the order of the Liverpool County Court judge absolutely refusing him his discharge.

Mr. Justice Cave, in delivering judgment, said the bankrupt had traded with his brother as chemical brokers until Oct. 31, 1884, when they were adjudicated bankrupts. The county court judge refused the discharge, and although an application had since been made to him to review his previous decision he absolutely refused to discharge the bankrupt. Mr. Justice Cave reviewed the conduct of the bankrupt since his adjudication, and said he thought the suspension of the bankrupt's discharge for seven years had been sufficient punishment. The bankrupt would therefore be entitled to his discharge on payment of his own costs.

Mr. Justice Williams concurred in this judgment.

#### AGREEMENTS IN RESTRAINT OF TRADE.

THE dispute between the Bolton and District Mineral Waters Association and a member who had broken a rule

has been carried to the Court of Appeal, and was tried before the Master of the Rolls and Lords Justices Bowen and Fry on February 16.

Among the rules of the association were several which bound each member, under a penalty of 10*l.*, not to sell any aerated waters at a price below 9*l.* per dozen. The rules were to be enforceable for ten years from the date of the agreement, October 1, 1888. A member who it is alleged had broken the rule was called upon by the committee to pay the penalty agreed upon, and, the payment not being forthcoming, the treasurer, as expressly empowered by the rules, sued him in the Bolton County Court, and obtained judgment. The Divisional Court, however, on appeal, held that the agreement was for the mere purpose of raising the prices against the public, and, not being founded on any legal consideration, was not enforceable. Against this judgment the plaintiff appealed.

After hearing arguments, the court dismissed the appeal.

The Master of the Rolls said the question was whether these rules were so in restraint of trade that the court would not assist the plaintiff in enforcing them. If a man was prevented by certain rules from selling his goods at any price he might choose for a time so long that it was unreasonable, or within a space so large that it was unreasonable, in either case that was a restraint upon trade which the court would not enforce. The memorandum of agreement did not authorise the court to restrict the rules to Bolton and district. The space, therefore, was too large. Then ten years was too long in point of time. It was a length of time so unreasonable, and so monstrous, for such goods as these, that no tribunal could possibly come to the conclusion that it was reasonable. That being so, these rules would not be enforced. They agreed, therefore, with the decision of the Divisional Court; but the reasons for that decision given by the learned judges proceeded upon another view, and that raised so large and important a question that they desired to express no opinion upon it, as it was not necessary to do so.

Lord Justice Bowen and Lord Justice Fry concurred.

#### INJUNCTION AGAINST INFRINGEMENT.

IN the Queen's Bench Division of the High Court on January 29, Mr. Justice A. L. Smith granted an injunction prayed for by the proprietor of the Carbolie Smoke-Ball against Jethro Foot and the Electrobale Company, ordering that the plaintiff be at liberty to sign final judgment against the defendants, the Electrobale Company, for an injunction restraining the latter from selling an appliance called an electrobale, or any other appliance made and got up in imitation of the carbolie smoke-balls sold by the plaintiff, and also restraining them from issuing circulars or advertisements so printed and coloured and got up as to deceive the public into the belief that the appliances called "electrobales" sold by the defendants are the smoke-balls of the plaintiff.

#### THE YORKSHIRE RELISH CASE.—GOODALL, BACKHOUSE & CO. v. WILKINSON & SIMPSON.

##### FOURTH DAY.

THE trial of this action—to restrain the alleged infringement of the plaintiffs' label for their Yorkshire Relish—was resumed on Tuesday last in the High Court, before Mr. Justice Stirling. This was the fourth day of hearing. At the rising of the court on Thursday, February 11, evidence was being called for the defendants, as reported by us last week.

Mr. Graham Hastings, Q.C., Mr. Lockwood, Q.C., and Mr. Cutler appeared for the plaintiffs; Mr. Aston, Q.C., and Mr. Waggett for the defendants.

Mr. Wild (White & Co., printers, Birmingham) gave evidence to the effect that in November, 1888, his firm supplied the defendants with 27,000 Castle Relish labels printed in red and dark bronze blue colours. Proofs of the label in light and dark blue were submitted to Mr. Simpson before the order was executed, and the dark blue was chosen.

Mr. Frank Jenner (traveller for Messrs. White) stated that in 1887 he had a conversation with Mr. Simpson with reference to changing their light blue to a dark bronze blue; and



in June, 1888, Mr. Simpson gave him the order to prepare a block. In November, 1888, the order was executed. His firm had never printed any light-blue labels for the Castle Relish. His firm printed labels for various sauce-makers, and, so far as his knowledge went, red and blue labels were very common in the sauce trade.

Cross-examined by Mr. Hastings: When Mr. Simpson showed him the Castle Relish label, in 1887, it was printed in light blue, and it did not strike him that it was an imitation of the Yorkshire Relish.

Re-examined: In his opinion there was very little in common between the plaintiffs' and the defendants' present labels except the colours. Did not think it possible to mistake the two. The rectangular-shaped label was common to the trade.

Mr. John Russell, grocer, Armfield Plain, Durham, said he had sold Castle Relish for ten or eleven years. Also sold Yorkshire Relish. His customers usually asked for "Castle" or "Castle Relish." He did not think that even an illiterate customer would make a mistake between the labels. If a shopman passed off Castle Relish for Yorkshire Relish, he would be dishonest.

Mr. Richard Lawson (manager of co-operative stores in a mining district in Durham) said he had sold the plaintiffs' Relish for sixteen years, and the defendants' Relish since 1884. Never knew a customer confound the one with the other. His customers usually asked for "Yorkshire" or "Castle." Also sold Powell's sauce. Both the plaintiffs' and the defendants' bottles were openly exposed in the store-window. His average yearly sale was sixteen dozen bottles of the Castle, and forty-eight dozen bottles of the Yorkshire.

Cross-examined by Mr. Hastings: Did not think that even in the hurry of a Saturday night's trade a customer would take the defendants' for the plaintiffs' Relish.

Mr. Elliott, grocer, Willington, Durham, and Mr. John T. Dickinson, grocer, Rothbury, Northumberland, gave similar evidence.

Mr. Mandel, chemist and druggist, Stockton-on-Tees, examined, said he had manufactured and sold the "Knife and Fork Sauce" since 1876, and he had registered the device (a plate with the Stockton coat-of-arms, and a knife and fork across it) in the middle of the label as a trade-mark. Some modification was made in the label in 1877, but since then it had been continuously used in its present shape and colours. From October, 1889, to October, 1890, the sales amounted to 534 gross. There was a covering-slip to his bottles, and covering-slips were common to bottles with glass stoppers. The plaintiffs had never interfered with him.

The court again adjourned.

#### FIFTH DAY.

The trial was continued on Wednesday.

Mr. Kennis, a traveller for the defendants, said after going through his sales-books, he found that from April 30, 1884, to April 30, 1886, his sales amounted to 275 dozen 6d. and 44 dozen 4d. bottles. These were supplied to from 80 to 90 different customers. The defendants sold goods other than Relish under the style of "Castle," such as Castle Baking-powder, &c. Cross-examined: Witness could not say, without further examination of books, that not more than 19 dozen bottles went to any one town during the two years mentioned. Mr. Aston said he would accept *de bene esse* the results arrived at by the other side; and Mr. Hastings said he was instructed that at Alnwick 19 dozen bottles of Castle Relish appeared to have been sold in the two years; but in the other towns included in witness's list, the majority of orders did not in the two years exceed 6 dozen bottles.

Mr. John Sheldrake, sauce and pickle manufacturer, Camberwell, said he had been twenty-five years in the trade, and made and sold sauces of his own. Had sold the "Universal Relish" for twelve years. He designed his own label, and did not think it was a "colourable imitation" of the plaintiffs'. Had used covering slips to his bottles for the last five years. It was a common thing to do. Looking at the plaintiffs' and defendants' bottles, thought them very different.

Mr. W. J. Salebell (wholesale chemist and drysalter, New-castle-on-Tyne) said he and his predecessor had made and sold the "Universal Sauce" for fifteen years. He did not consider the defendants' and plaintiffs' labels alike.

Mr. George Gibson (one of the defendants' travellers) proved taking 25 orders in 1882, and 45 orders in 1883, for Castle Relish. Mr. Walter Howe (defendants' ledger clerk) said he had made an examination of the sales and day books; and in the course of cross-examination as to specific sales, Mr. Hastings said it was impossible to pursue his cross-examination unless time was given to inspect the defendants' ledgers, sales, and day books. After a discussion,

His Lordship said this was a vital part of the case, and the plaintiffs ought to have sufficient opportunity to inspect the books. He was afraid the result must be that the final examination of Mr. Howe and Mr. Kennis must stand over.

Mr. Aston said the remaining witnesses should be called before an adjournment. These were Thomas Smith, foreman of the defendants' packing department, who gave evidence that since the fire in August, 1888, the light-blue label had not been used. Mr. Lawson, recalled, produced his invoices from 1884 to 1888, and it was shown that in one year he received 39 dozen bottles of Castle Relish from the defendants. Mr. Simpson was also recalled, and further examined as to the supply of labels for Castle Relish in 1883.

At this stage the further hearing was postponed until the following day, to enable the plaintiffs to inspect the defendants' books.

#### SIXTH DAY.

On the re-assembling of the court on Thursday.

Mr. Hastings said the defendants' books had been examined and time would be saved if his learned friend would admit that many of the orders entered in the defendants' books were for single bottles of Castle Relish, and that in no case did the orders exceed six dozen bottles at one time for any single customer. He was instructed that this was the result of the investigation.

Mr. Aston was quite willing to admit that many of the orders supplied by the defendants were for single bottles to different customers, but he was not prepared to admit that in no case was more than six dozen supplied to any one customer.

Mr. Kennis was recalled, and in reply to Mr. Hastings, said he could not point out any customer who ordered of him at any one time more than six dozen of the Castle Relish. So far as he could remember, no single customer ordered through him more than six dozen bottles twice in a single year. In the course of a single year perhaps a dozen people gave him orders for six dozen bottles at a time.

By Mr. Aston: His sales were in the country districts (agricultural and mining) of five counties.

Mr. Gibson was also recalled, and, in reply to Mr. Aston, put in copies from the books of the following orders:—July 15, 1884—the Co-operative Society, Seaton, 12 dozen; October 13, 1884—the Co-operative Society, Armfield Plain, 12 dozen; June 29, 1885—Messrs. Foster & Russell, 12 dozen.

This concluded the evidence.

Mr. Waggett then summed up the evidence, and submitted that no case for an injunction had been made out by the plaintiff, and drew especial attention to the fact that the defendants had been openly selling their "Castle Relish" in five counties, in the ordinary way of trade, and not a single case of deception had been shown. A mere comparison of the labels was, he submitted, sufficient to prove that there had been no legal imitation. The admission by the defendants, in the course of their correspondence, that there had been "colourable imitation" by the use of the light-blue label, was very satisfactorily explained by Mr. Simpson, who said that by "colourable imitation" he meant imitation of the red and blue colours. The defendants' label used since November, 1888, was, he submitted, not in law a colourable imitation, and that the plaintiffs had failed to make out a case.

Mr. Hastings, replying on the whole case, pointed specifically to the long array of trade witnesses who said that the defendants' label was so like the plaintiffs' as to be calculated to deceive. For the purposes of the plaintiffs' action there was but very little difference between the light and dark-blue labels of the defendants, especially as it had been proved that so late as 1890 Castle Relish, bearing the old red and light-blue label, had been purchased. With regard



to the covering slip, what was objected to was that the defendants' was got up like the plaintiffs'.

His Lordship reserved his judgment.

PRICE'S PATENT CANDLE COMPANY (LIMITED) v.  
PRICE & CO.

ACTION FOR AN INJUNCTION.

ON Wednesday, before Mr. Justice Stirling, sitting in the Chancery Division, this action was commenced.

Mr. Graham Hastings, Q.C., Mr. Carpmael, and Mr. Wright appeared for the plaintiff company; the Solicitor-General (Sir Edward Clarke, Q.C.), Mr. Aston, Q.C., and Mr. Sebastian appeared for the defendant company.

Mr. Hastings, in opening the case, said the action was brought by Price's Patent Candle Company against the defendant, described as Price & Co., but whose real name was Arthur James Cove, for an injunction to restrain him from selling glycerine under the designation of Price's glycerine, Price's pure glycerine; or Price & Co.'s glycerine, or Price & Co.'s pure glycerine, or under any designation calculated to deceive the public into the belief that the glycerine which they were purchasing was manufactured by the plaintiff company. The plaintiff company were well-known manufacturers of soap and candles, and they made in the course of their trade a by-product called glycerine, which they distilled by a patent process, and produced what was well known in the market as pure glycerine. The patent was taken out in 1855, and had long since expired, but the plaintiffs' glycerine was still manufactured by the patented process. The defendant, Arthur James Cove, was a perfumer, but he traded as to one part of his business as Price & Co. In 1889 the plaintiff company's managing director learnt through one of his travellers that the defendant was selling "pure glycerine." Previously he had his attention called to 1*lb.* bottles of pure glycerine sold by the defendant, but no notice was taken of the matter. The large bottles became a more serious matter, and then the plaintiffs instructed their solicitors to open a correspondence with the defendant. This was done, and the defendant claimed as a matter of right to continue doing what he had done.

The following evidence was then taken.

Mr. John Calderwood, examined by Mr. Hastings, said he was the managing director of the plaintiff company, and had been the manager of the company for about ten years. His company decomposed about 5,000 tons of fat per annum, and, on an average, from 300 to 350 tons of glycerine was derived therefrom. There was a patent process brought out in 1855 for the purification of crude glycerine. Since then the glycerine had been distilled under that process. The letters patent were granted to George Ferguson Wilson and George Payne. Awards for pure glycerine had been obtained in all the great exhibitions since 1851 by his company, whose reputation for the product was of the highest. The product was known in the trade as "Price's glycerine," and sometimes as the company's glycerine.

What would you understand "Price's glycerine" to mean?—Glycerine manufactured by my company. The labels on the bottles sold to the public bore, and always had borne, the words "Price's pure glycerine." A traveller drew attention to a bottle of glycerine sold by the defendant in 1889.

Do you think that the bottle sold by the defendant, labelled "Price & Co.'s glycerine," or "Price & Co.'s pure glycerine," is calculated to deceive the public?—Certainly. Our product is so well known, that any glycerine sold under the name of Price would probably be believed to be the manufacture of our company.

Do you think that the words "manufactured by Price & Co., perfumers," &c., would make much difference?—No; I do not think that the majority of purchasers would take the trouble to read that part of the label.

Do customers buying glycerine from you sell it with their own names at the bottom of the label?—I believe some of them do.

Were you aware before 1889 that the defendant was selling these bottles?—No, not before 1889, but I had heard of 1*lb.* bottles sold on a card some time before.

Did you consider that of any importance?—No, I thought that that was too small a matter to take up.

Is glycerine sold largely in the English market except by your company?—Yes, very largely; but I never heard of its being sold by any person or company as "Price's" except by the defendant. So far as I know the defendant's glycerine is not known to the wholesale trade. Our sales for the twelve years, from 1875 to 1886, average about 18,000*l.* a year. I knew of the plaintiffs' glycerine as a well-known product twenty-five years ago.

Cross-examined by the Solicitor-General: Before joining the company I was engaged in the manufacture of paraffin candles. There is very little glycerine sold in this country in the retail trade under the name of any maker except Price's. There is Sarg, a Vienna firm, well-known, and Mr. Gibbs, a London firm, known to the retailer but not to the consumer. I object to the use of the name Price in connection with glycerine. My firm is known as Price's Patent Candle Co (Limited).

Is that title put on all your labels?—I think it is. Substantially we always use the full title.

Did you ever use such a title as Price & Co.?—No; I never heard of the defendant's business until recently.

Did you ever know any Price & Co. which sold glycerine?—I do not think I ever did. I do not know the history of our company except by reading. I think some person of the name of Price was once connected with it, but there was no one named Price connected with it when the company took over the business. The patent (Wilson and Gibbs) expired in 1869. About three years ago my attention was first called by some of our travellers to the sale of these small 1*lb.* bottles, exhibited on cardboard in shops. The words on the label on the 1*lb.* bottle were substantially the same as on the large label. So long as the defendant continued to sell these little bottles I did not think that our trade would be affected. I did not at the time consult our solicitors about the matter.

Re-examined: I did not think the 1*lb.* bottle trade sufficiently important to notice, but when I saw the large bottles I thought the defendant was going ahead. (Laughter.)

Mr. Winsford (one of the plaintiffs' travellers), examined by Mr. Carpmael, said the plaintiffs' glycerine had acquired a very high reputation in the market and was known in the trade certainly for more than thirty years as "Price's Glycerine." The public as well as the trade knew it by that name. Called the attention of Mr. Calderwood to the fact that 1*lb.* bottles of glycerine as "Price's," were being sold. It was four or five years ago when he first saw 1*lb.* bottles for sale, soon after he saw 2*lb.* bottles for sale, and in 1889 he saw ½-lb. bottles. Purchased several of the large bottles at different shops in London.

And what did you ask for?—In each case I asked for "Price's Pure Glycerine."

Cross-examined by the Solicitor-General: The second quality of glycerine sold by the plaintiffs had not their name, and customers often said if you will only put your name on the labels we will sell it fast enough."

Why do you not put your name on the label as Price's second quality?—You must ask the manager that.

You know well enough. Is it not that people do not care to buy something marked second quality?—Certainly they object to that.

The further hearing was adjourned until Tuesday.

THE ACTION AGAINST SEIGEL'S SYRUP.—DR. FOX v.  
A. J. WHITE (LIMITED).

IN the Court of Appeal on Wednesday, before Lords Justices Lindley, Bowen, and Kay,

Mr. Waddy, Q.C., on behalf of the defendants, applied for a new trial of the action of Fox v. A. J. White (Limited), which was an action for libel, tried at the Leeds Assizes, before Mr. Justice Lawrance and a special jury. Counsel, in support of his application, said that at the trial the jury awarded plaintiff 1,000*l.* damages. Although some of the observations which he (the learned counsel) should make would be naturally pertinent upon the question of whether the verdict was against the weight of evidence, and, although one of the grounds which were stated in the notice of appeal was that the verdict was against the weight of evidence, yet, considering the views the court had taken of late years with



regard to that, he did not think it was a matter that he should be justified in arguing solemnly from that point of view. The question really was, whether the damages awarded were not preposterous to a degree. The defendant in the case was the proprietor of a celebrated patent-medicine called "Mother Seigel's Curative Syrup"—a medicine which would cure a great many things, according to the views of a great many people; and, according to the views of others, it was a very harmless kind of thing, that would do little or no harm to anyone. It appeared that, in the course of advertising this very important patent medicine the defendants issued an almanac, which was entitled on the cover, "The Peculiar People in America." There was an article upon the Peculiar People, and then an article upon the distinctive virtues of this medicine. The next article was entitled, "Speaking of it with rapture," and the next, "A Doctor's terrible mistake," and this was the article which was supposed to contain the libel. The almanac contained pictures of ladies and gentlemen who were more or less known—General Boulanger, William O'Brien, Sarah Bernhardt, and others, showing what they were supposed to be like now, and also what they would be like when they got old if they did not take the syrup. (Laughter.) The article was on a page opposite a picture of La Belle Fatma, but who she was learned counsel didn't know. (Laughter.) The article upon which the action was based described what was said to have happened to a man named Perrin. Perrin was a guard on the Manchester, Sheffield and Lancashire Railway, and he gave an account, which was believed at the time by the people who read the document, and it was presented with substantial accuracy in the article. What was said about Doctor Fox was this. First of all they said that Perrin had been misled by another doctor, and that it was really that doctor's "terrible mistake" which was the serious thing complained of. Perrin went to Dr. Sykes, and Dr. Sykes, after examining him, said that he was suffering from catarrhal phthisis, or consumption, he could give him something to ease him, but he could not cure him. Perrin went home dispirited, and then the symptoms described in the pamphlet supervened, and Perrin got so scared that he started to consult Dr. Fox, described in the pamphlet as the "late" Dr. Fox, of 39 Piccadilly, who was consulting surgeon to the railway, and also to the infirmary. Dr. Fox, the article stated, examined the anxious guard, and then signed his death-warrant in the following manner: "The man Perrin is evidently frightened. He is suffering from phthisis. Cod-liver oil and iron are indicated." "If Perrin really had consumption," the article proceeded, "it was nothing short of a miracle that he ever recovered, but in point of cold fact he never had consumption at all. What he was suffering from was indigestion and dyspepsia, which often produced the same symptoms. The doctors had blundered, and if it had not been for the interference of another man who recommended Seigel's Syrup, Perrin would probably have gone to his grave, but to-day he is alive and hearty." The jury having found that that was a libel, it would be a difficult matter for him (Mr. Waddy) to say that the statement that the doctor had made a mistake was not libellous in itself. It might be said that in itself it was libellous.

Lord Justice Lindley: You justify it, I see?

Mr. Waddy: Yes, my lord, and I think that your lordships will come to the conclusion that our justification will be a very good reason for reducing the damages. Not the slightest attack was made upon Dr. Fox's character.

Lord Justice Lindley: No, not upon his personal character; it was an attack upon his professional skill.

Mr. Waddy: Exactly; that is it.

Lord Justice Lindley: And you say in your justification that the consequences of the mistake were such as to nearly kill Perrin.

Lord Justice Bowen: I see you say that Dr. Fox prescribed cod-liver oil and iron, and Perrin took gallons of cod-liver oil and sherry instead of the iron. (Laughter.)

Mr. Waddy, proceeding, argued that, even supposing Dr. Fox had been libelled, there was not the slightest evidence that he had suffered a particle of damage thereby, nor was any special damage claimed in the statement of claim. In support of this part of his argument he quoted from the evidence given by Dr. Fox at the trial of the action, in which, while stating that the article had damaged him in his professional career, he was in 1886 in practice in Man-

chester. He afterwards left, and went into a lunatic asylum. This originated a report of his death, and caused the defendants in the article to describe him as the "late" Dr. Fox.

Lord Justice Lindley: Unfortunately for you, he was not dead.

Mr. Waddy: Yes, my lord; but it shows that there was no malice on our part. Mr. Waddy, continuing his argument that the plaintiff had sustained no specific damage, read further extracts from his evidence, which showed that after his breakdown at Manchester he had not been in practice for himself, but had been acting as *locum tenens* for medical men in different parts of the country. He admitted that since 1886 he had not been in a position to keep his wife and family. Counsel, in support of the plea of justification, argued that the mistake that had been made was justly described as a terrible mistake because the man Perrin was called as a witness at the trial, and was then well and hearty. It could not be denied that the mistake had been made, because there was Dr. Fox's written certificate to show it.

Counsel had not concluded his opening speech when the court adjourned.

The case was resumed on Thursday, when Mr. Lawrance, for the appellants, further argued that the alleged libel was true in substance and in fact, as the circumstances showed that the plaintiff had made a mistake which it was quite justifiable to call a terrible mistake.

Lord Justice Bowen: Whatever view the jury took they must have thought that you were dealing recklessly with the reputation of a medical man for the purpose of selling your wares, and, further, that when you put him in the witness-box you failed to establish that he had committed the terrible mistake you allege he had committed. You attacked his reputation, which is the breath of his life.

On the conclusion of the arguments,

Lord Justice Lindley, in giving judgment, said that 1,000*l.* damages was unquestionably a large sum—more, perhaps, than this court would have felt disposed to award. The question they had to consider was, having regard to the principles the court always acted upon in cases of this kind, whether they could properly interfere and order a new trial on the point of the reduction of the damages. Now, damages might be so extraordinarily out of proportion to the injury done as to satisfy the court that there had been some gross miscarriage of justice, although, perhaps, the court might not be able to speak exactly with regard to the cause of it. In such cases as that, of course, the court could interfere, but, apart from cases like that, it had been a settled principle for years that the court would not interfere unless they could be shown that the jury had been guided by some undue motives. They had to consider whether this case could properly be sent down for a new trial in conformity with those principles. The case was a remarkable one. The plaintiff was unquestionably entitled to damages of a substantial kind—there was no question about that. The libel was remarkable because it spoke of the plaintiff as the "late" Dr. Fox, and it certainly looked as though defendants had published this libel thinking they were safe, inasmuch as the person libelled was dead and could not turn up against them. Unfortunately for them, the person whom they described as the "late" Dr. Fox was alive, and brought this action. What course did the defendants take then? They did not apologise; they did not say, "We have made a mistake and we are sorry," but they attempted to justify it, and their justification was that Dr. Fox really did write the letter referred to in the libel, and that the libel was true in substance and in fact. The libel they sought to justify was that the plaintiff had made a grievous, a most grievous blunder. Now, had they justified that? Unquestionably not. There was not a tittle of evidence that Dr. Fox was guilty of any such course of conduct as they said he was. Dr. Fox had made out a case for substantial damages, and the question was simply whether the damages were so excessive as to necessitate a new trial. With reference to that a great deal turned upon details and upon the line taken in court by defendants in conducting their case. A great deal turned upon whether Dr. Fox did or did not write to Dr. Sykes the letter in which it was alleged he said



—"In the case of the guard Perrin. This man is evidently frightened. He is suffering from phthisis and dyspepsia. Cod-liver-oil and iron are indicated." That letter was not, however, the libel complained of—it was only a part of it, and a comparatively small part of it. The evidence upon this point stood in this way: Dr. Fox did not recollect writing the letter, and denied that he had done so to the best of his belief. It was a long time ago, and he had been ill for three years or thereabouts, and his memory no doubt was impaired. On the other side the defendants called Perrin and some more railway officials, who all testified to the fact that such a letter was read at a meeting of their provident society, and was at the time common talk. Curiously enough, Dr. Sykes, to whom it was alleged that this letter was written, was not called by the defendants, although he was in court. An explanation, he would not say a satisfactory one, of that had been given by Mr. Waddy, who said that the libel also contained a libel upon Dr. Sykes, therefore he did not wish to call him. Suppose the jury, after hearing the evidence, came to the conclusion that the letter was written. What then? It would not be justification. The sting of the libel was in the suggestion that Dr. Fox had made a grievous blunder. The jury might have taken this view—that the whole object of the libel was to puff defendants' wares. They were not libelling Dr. Fox for any public purpose, but they had gone out of their way to puff their own quack medicine—he did not speak disrespectfully of quack medicines, for some of them were very good; and they had been so utterly unscrupulous as to the means they took to effect their object, as not to shrink from casting blame upon a person supposed to be dead, but who happened to be alive. If the jury took that view the 1,000*l.* was not so excessive a sum that this court could reduce it, therefore the appeal would be dismissed with costs.

Lord Justice Bowen, in concurring, said that, in his opinion, the amount of the damages was too large, and if he had been trying the case he should have warned the jury against such a verdict as would have awarded plaintiff so large a sum. But, that was not the question for this court, which had simply to consider whether the verdict was beyond all reason. If it was not beyond all reason the responsibility rested with the jury and not with this court. He should not have punished the defendants so heavily, but, at the same time, it was impossible to say that the jury were not within their province in taking a severe view of the libel, and visiting it with exemplary damages.

Lord Justice Kay briefly concurred.

The usual order was made as to costs, including the costs of the shorthand writer's note of the judgment at the trial, and the court further directed the sum of 1,000*l.*, which had been paid in, to be handed over to plaintiff.

### BANKRUPTCY REPORTS.

*Re* JULIUS BLUMENTHAL, 2 Whittington Avenue, E. C. Merchant and Commission Agent.

At the London Bankruptcy Court on Tuesday last, the second meeting of creditors under this failure was held before Mr. Wreford, Sen. Official Receiver. It will be remembered that the debtor failed recently with gross liabilities 33,132*l.* (unsecured 16,740*l.*), and assets 3,926*l.* He had speculated in citric acid, &c., and attributed his failure to losses in trade and upon Stock Exchange speculations. At the former meeting the creditors entertained an offer of a composition of 7*s.* 6*d.* in the *£* within a month, certain claims being withdrawn or reduced. The chairman now announced that sufficient creditors had declared in favour of the scheme to carry it. It therefore only remained for the debtor to apply to the court for its approval.

*Re* MARGARET BROOKE, High Street, Doncaster, widow of a Chemist and Druggist.

THE creditors of this debtor met on Monday at the offices of the Official Receiver. She had been trading under the style and firm of T. S. Brooke, chemist and druggist, having succeeded her husband in business. From the statement of

the Official Receiver it appeared that the debtor's husband died in 1880, and since that time Mrs. Brooke had been trying to pay off old debts and had at the same time been incurring new liabilities in the ordinary course of business. She stated that her insolvency had been brought about by the pressure of creditors and in consequence of her having to bring up a large family. She found out that she was unable to meet her liabilities about twelve months ago, but had carried on in the hope that she would be able to overcome the difficulty. The cash book had been carefully kept but had not been balanced for some time. The liabilities to unsecured creditors were 632*l.* 16*s.* 5*d.*, and the assets were estimated at 250*l.* 11*s.* 4*d.*, but from this must be deducted 46*l.* 4*s.* 8*d.* for preferential creditors, leaving 204*l.* 6*s.* 8*d.*. The debtor estimated her stock in trade at 80*l.* and it had realised 132*l.* 8*s.* 5*d.*; the trade fixtures which were put down at 30*l.* had been sold for 91*l.* 17*s.*, and the furniture, which was originally valued at 65*l.*, was sold for 65*l.* 12*l.* 9*d.*. The book debts made 35*l.*, about 5*l.* less than was estimated. There was only a legacy to dispose of and then the estate would be divided. Altogether 324*l.* was now in the hands of the Official Receiver, and about 40*l.* more was expected to be realised. After the costs had been paid a fair dividend would be left for the creditors. The matter was left in the hands of the Official Receiver.

### Gazette.

#### PARTNERSHIPS DISSOLVED.

Hobson & Trimble, Leeds, wholesale and retail grocers and druggists.

Spencer, J. H. C., and Dunham, J. V., under the style of the Freezall Food Preservative Company, Kennington Road, S.E.

#### THE BANKRUPTCY (DISCHARGE AND CLOSURE) ACT, 1887.

##### ORDER MADE ON APPLICATION FOR DISCHARGE.

Ferris, John Andrew, Buckingham Palace Road and Victoria Square, surgeon and chemist and druggist—discharge allowed.

#### THE BANKRUPTCY ACTS, 1883 AND 1890.

##### ADJUDICATION.

Bartlett, George Hill, Egremont, doctor of medicine.

##### ORDERS MADE ON APPLICATION FOR DISCHARGE.

Dougall, Keir Johnson, Lyddington, medical man and trainer of horses—discharge suspended for three years.

Perkins, Whitfield, St. Endellion, doctor of medicine—discharge granted.

### Trade Notes.

THE report of W. B. Fordham & Sons (Limited) for the year ending December 31 states that the new issue of 10,000 shares at 10*s.* per share premium was considerably oversubscribed in August last, and the premium produced (5,000*l.*) has been carried to a special reserve account. The net profits (including 1,721*l.* from last account) amounted to 11,235*l.*, and the directors recommend a dividend at the rate of 12½ per cent. per annum on the entire capital for the last six months, tax free, making 10 per cent. for the year (free of tax). The directors are entitled to 2½ per cent. on the capital for their remuneration, and propose to write off goodwill 1,000*l.*, leaving 1,985*l.* to be carried forward.

BRUNNER, MOND & Co.—The directors of Brunner, Mond & Co. (Limited) state in their half-yearly report that the divisible profits reach 174,354*l.* They recommend a dividend of 7 per cent. on preference capital, placing 28,829*l.* to reserve and carrying forward 10,539*l.* The balance-sheet shows on the side of property and assets 227,506*l.* in freehold land, waterworks, brine shafts, &c., which, with additions made in the past half-year, forms a total of 232,202*l.* The alkali-works at Winnington and Sandbach are set down at 648,444*l.*, which, with additions in the past half-year, makes a total of 682,454*l.* The reserve fund is 152,380*l.* Dr. Hewett, Mr. Jarmay, and Mr. Coghill retire from the directorate by rotation.



## TRADE-MARKS APPLIED FOR.

THE *Trade Marks Journal* publishes the following notice:—"Any person who has good grounds of objection to the registration of any of the following marks may, within one month of the date of this journal, give notice in duplicate, at the Patent Office, in the form 'J,' in the second schedule to the Trade Marks Rules, 1890, of opposition to such registration." All communications to be addressed to H. Reader Lusk Esq., Comptroller General, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C.

(From the "*Trade Marks Journal*," February 4, 1891.)

Representation of filled sack with floating banner and various wording; for chemical substances for use in agricultural and horticultural purposes. By the London Agricultural and Horticultural Bag and Packet Manure Manufacturing Association, 119 Bow Common Lane, London, E. 151,535.

"PETROLEUM SHAMPOO," and picture of groom washing deer-hound; for a washing preparation for animals. By the Sanitary Food Company, Bendon Valley, Wandsworth, S.W. 151,936.

"INVINCIBLE," and shield with representations of various animals; for chemical substances for veterinary, sanitary, &c., purposes; and also for use in medicine and pharmacy, and for perfumery. By Hodgson & Simpson, Calder Soap Works, Wakefield. 152,138, 152,139, 151,349.

"THE BELGIAN CAMOMILE GROWERS' DIRECT SUPPLY ASSOCIATION"; for natural camomile flowers for medicinal purposes. By B. F. Rosenthal & H. F. Goshawk, trading as Rosenthal & Co., 47 Minories, London. 99,455.

"HELOXILLA"; for a medicine. By E. S. Hermes, 6 Farleigh Road, Stoke Newington, N. 99,742.

"MALIGAWA"; for a medicine for human use. By William Dance, 60 New Road, Chatham. 99,845.

"PEPTOPAPAIN"; for a chemical substance for use in medicine. By T. F. Perkins, trading as Perkins & Co., 99 Piccadilly, W. 150,326.

"PALM HEALTH," and picture of young lady with fan; for a preparation for cure of dropsy, lumbago, indigestion, and other ailments. By J. T. Fielding, West View, Great Harwood, Lancaster. 150,844.

Picture of robed figure holding scroll unrolled; for an embrocation. By C. W. Arminson, 1 Church Street, York. 151,338.

"TIGER BRAND," with picture of a tiger, and "TIGER"; for perfumery and toilet articles, &c. By Hodgson & Simpson, Calder Soap Works, Wakefield. 151,350, 151,342.

"DYNAMITE"; for perfumery and toilet articles. By Hodgson & Simpson, Calder Soap Works, Wakefield. 151,344.

(From the "*Trade Marks Journal*," February 11, 1891.)

"PILANTRA," and other wording, on oblong label; for chemical substances used in pharmacy and medicine. By the Geddes Manufacturing Company, 249 High Holborn, London. 99,950.

Sketches describing cure of a cripple; for patent medicines. By William Rockliffe, 35 South Street, Durham. 152,353.

"ZETHION CREAM"; for a medicinal preparation. By J. J. Johnson, 54 Queen's Road, Peckham, S.E. 152,800.

"ALBAROES"; for medicines for human use. By H. J. Browne, 76 Gloucester Crescent, Hyde Park, W. 152,848.

"RUBY," "OPAL," and a sketch representing an irregular block; for kauri gum. By J. C. Firth, Auckland, New Zealand. 151,484, 151,486, 151,487.

"FIBRINE CHRISTIA"; for a material prepared from animal and vegetable fibres, for surgical and curative purposes. By T. Christy, 25 Lime Street, E.C. 99,861.

"WILLIAM BAKER," as signature; for mineral and aerated waters, &c. By William Baker, Burton Place, Hanley, Staffordshire. 152,410.

"JOHN T. TROTTER," as signature; for mineral and aerated waters, &c. By J. T. Trotter, Market Place, Hexham, Northumberland. 152,442.

From the "*Trade Marks Journal*," February 18, 1891.

"TONIC PORT WINE," other wording, and horse-dragon's head in castle on label; for a medicated tonic port wine. By W. & A. Gilbey, Pantheon, 173 Oxford Street, London. 151,186.

"WARDIEU'S SPECIALITIES," and sketch of the human brain; for medicinal preparations. By Wm. M. Roope, trading as Wardieu's Spécialité Drug Company, 9 South Street, Finsbury, E.C. 152,258.

"PEARL" on figure of a globe; for kauri gum. By Josiah C. Firth, Auckland, New Zealand. 151,485.

"SALUTARIS WATER," and microscopic views of drop of salutaris and ordinary water; for a pure distilled water. By A. W. Haig, C. H. Haig, E. W. Haig, C. E. Haig, and G. A. Haig, trading as The Salutaris Water Company, 236 Fulham Road, London. 151,566.

"ROCOCO"; for toilet soaps and perfumeries. By Gustav Boehm, 38 Moreland Street, Goswell Road, London. 152,802.

## MARRIAGE.

[Notices of Marriages and Deaths are inserted free if sent with proper authentication.]

MILLER—STEVENS.—On February 4, at St. Nicholas, Strood, by the Rev. C. H. Banning, assisted by the Rev. M. Fox, Mr. John Miller, chemist and druggist, of Brighton, son of the late Mr. H. M. Miller, 15 Fundsbury Road, Strood, Kent, to Adelaide, second daughter of Mr. J. Stevens, High Street, Strood.

## DEATHS.

BROWN.—On January 31, Mr. Edward William Brown, chemist and druggist, Highgate Hill, N. Aged 44.

BROWN.—On February 7, Mr. Robert Denzil Brown, chemist and druggist, Boughton Monchelsea, Kent.

FORSMANN.—The death, on 24 January (O.S.), at St. Petersburg is announced of Apotheker Alexander Gustavovitch Forsmann, president of the St. Petersburg Pharmaceutical Society. Mr. Forsmann, who was the son-in-law of Mr. Ant. von Waldheim, the accomplished president of the Austrian Apotheker Verein, was 47 years of age. The deceased gentleman was of Finnish origin, and was the proprietor of a pharmacy, owned by his father before him, in St. Petersburg.

GILBERT.—On January 29, Mr. Charles Edwin Gilbert, chemist and druggist, Bloomsbury Street, Birmingham. Aged 55.

GREENHALGH.—On January 29, Mr. William Greenhalgh, chemist and druggist, Pendlesbury, Lancs. Aged 60.

HALL.—On January 26, Mr. Thomas Henry Hall, chemist and druggist, Ashley Colne Road, Burnley. Aged 26.

HALTON.—On February 3, at Haydock, Mr. John Halton, chemist and druggist and postmaster. Aged 43. Mr. Halton was apprenticed with Mr. Fairhurst, of Warrington, and, after successfully passing his examinations, he went to manage a shop in Alfreton, Derbyshire. From there he took a situation at Radcliffe, and later set up business for himself at Earlstown, his native place. About eleven years ago he established a business at Haydock, which he successfully carried on to the time of his decease. Mr. Halton has officiated as postmaster of Haydock for the last ten years. The immediate cause of death was Bright's disease, from which Mr. Halton has suffered for some months past.

HOWARD.—On January 28, Mr. George Howard, chemist and druggist, late of Royal Hill. Aged 77.

SMITH.—On January 24, Mr. Sidney Smith, chemist and druggist, Budleigh Salterton. Aged 60.





GOLD MEDALS 1884-1885-1886-1888.

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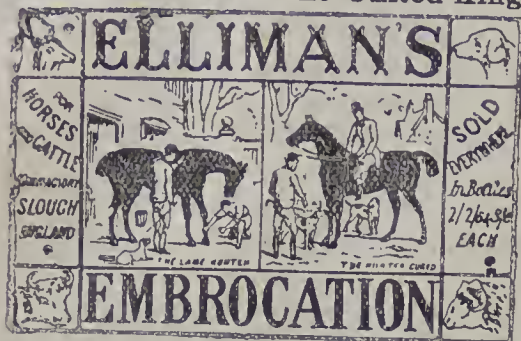
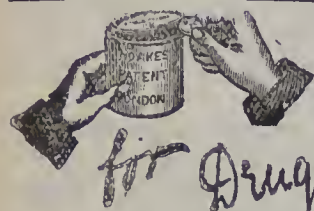
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*Fletcher's*  
*Concentrated Liquors*

## EDITORIAL NOTES.

EVADING THE PHARMACY ACT.

THE defendant and her associates in the case of the Phar-  
maceutical Society v. Price, which is reported this week,  
when they found that the emissaries of the Society were  
after them, "took legal advice," and soon found that there  
was a very easy way of arranging matters to the satisfaction



# The Chemist and Druggist

## SUPPLEMENT

Businesses Wanted.  
Businesses for Disposal.  
Premises to Let.  
Auction Sales.

SATURDAY, FEB. 21, 1891.

Partnerships.  
Situations Vacant.  
Situations Wanted.  
Miscellaneous.

### CHEMISTS' TRANSFERS.

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1.—LONDON.—First-class locality.—Old-established Business; held by vendor many years; all first-class Dispensing; returns £1,200 yearly; corner position; full particulars on application with London reference.

2.—LONDON, N.—Main road; bus and trams pass the door; good-class Retail and Dispensing; returns £500 yearly, capable of being much increased; well-fitted shop and good stock; vendor will accept, from an immediate purchaser, £250.

3.—LONDON SUBURB, E.—Retail and Family Business; *very profitable*; returns £950 yearly, rapidly increasing; single-fronted, well-fitted shop and good stock; good 8-roomed house; about £350 to £900 required.

4.—LONDON (West-end).—First-class position; nearly all good-class Dispensing; well suited for a Major man; returns £1,000; particulars on receipt of London reference.

5.—LONDON, N.W.—Bus and trams pass the door; good-class Dispensing and Retail, with profitable Prescribing connection attached; returns £950 yearly; good house attached; about £750 required.

6.—HOME COUNTIES.—Mixed Business; returns £2,000 yearly; business capable of being much increased; well-fitted shop and good stock; about £1,000 required.

7.—NORTH OF ENGLAND.—Good-class locality; Light Retail and Dispensing Business; returns last year £700, *with good profits*; well-fitted shop and good stock; large commodious house; about £600 required.

8.—LEICESTERSHIRE.—Good country Business, Retail and Dispensing; no heavy trade; returns about £800 yearly, *with good profits*; large handsome double-fronted shop and good stock; large house, good garden and vicery, &c.; about £700 required.

9.—KENT.—Good Town; Retail and Dispensing Business; returns £1,300 yearly, all ready money; double-fronted shop and large stock; good house attached; rent low; price £1,000; part may be paid by instalments.

10.—LANCASHIRE.—Manufacturing town; good-class Retail and Dispensing Business; returns £930, *with good profits*; shop is large, double-fronted, and in good position; good 8-roomed house; vendor, retiring from business, will accept valuation of stock and fixtures.

11.—SUSSEX.—Retail and Dispensing Business, with some Agricultural trade attached; returns last year, £800, *profits good*; large house held on lease, rent low; price about £700.

12.—SURREY.—Dispensing and Retail, with Post Office attached; old-established Business; returns between £700 and £800 yearly; shop well fitted and fairly stocked; comfortable house, with garden, &c., held on lease; valuation terms if wished.

13.—ESSEX.—Good market town; Mixed Business; returns £1,650 yearly; *net profit over 20 per cent.*; large, well-fitted shop and good stock; commodious premises, warehouse, stabling, &c.; comfortable house and good garden; rent £68, on lease; valuation terms if wished.

14.—SUSSEX.—Good town; Dispensing and Retail; returns £550 yearly; single-fronted shop and good stock; good house, moderate rental price about £480.

Particulars of any of the above will be furnished on application.

N.B.—NO CHARGE TO PURCHASERS.

Other Businesses, Town and Country; particulars free on application. Personal applicants receive Messrs. O. & Co.'s direct attention and advice, where required, free.

TERMS FOR VALUATION ON APPLICATION. APPOINTMENTS BY POST OR WIRE HAVE IMMEDIATE ATTENTION.

Messrs. ORRIDGE & Co. invite communications from COLONIAL and FOREIGN firms where business of a confidential nature requires the especial attention of a London agent.

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### TENDER.

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#### LAMBETH VESTRY.

TO CHEMICAL MANUFACTURERS & DEALERS IN CHEMICALS.

THE Vestry of the Parish of Lambeth hereby give notice that they are desirous of contracting for the following articles, viz.:—Pure Liquefied Carbolic Acid, Commercial Liquid Carbolic Acid, Carbolic Powder, Chlorinated Lime, Sulphuric Acid, Sulphur of Commerce.

Specifications and particulars, with forms of tender, can be obtained upon application to the Inspector at the Vestry Hall, Kennington Green, between the hours of 9 and 12 o'clock.

Sealed Tenders, directed to the Vestry, and marked "Tender for Disinfectants," must be delivered at the Vestry Hall, not later than 4 o'clock on Thursday, the 12th March.

The Vestry do not bind themselves to accept the lowest or any tender.

Vestry Hall, Kennington,  
18th February, 1891.

By order,  
HENRY J. SMITH,  
Clerk to the Vestry.

### TO LET.

HEATH Street, Hampstead.—To be Let, a large double fronted shop and premises; suitable for Chemist, any business; rent £65, on lease or otherwise. Apply to Mr. Davis, 63 St. Martin's Lane, Charing Cross.

LONDON, N.—Corner Shop for disposal; capital nucleus for Dispensing Business, hitherto used for Retail; fixtures for disposal; stock optional; £120 required. Full particulars on application at Messrs. Orridge & Co.'s Offices, 32 Ludgate Hill, London, E.C.

GLOUCESTER.—Excellent Shop and Dwelling-house where Chemist's business has been carried on for 9 years; capital opening for beginner; populous and increasing neighborhood; no business of the kind near; fixtures can be taken; rent low. Apply, Sandoe & Son, Gloucester.

BECKENHAM, KENT.—To be Let or Sold, a shop with a splendidly-fitted and arranged house, suitable either for a Chemist or Doctor, in a good position, with stabling attached; now in possession of a Doctor, but possession obtained at Lady Day. Apply, to H. J. Brown, 1 Babington Road, Streatham, S.W.



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**LONDON (near).**—Retail, Prescribing, and Dispensing, with profitable small Wholesale; returns, with branch, £1,000; price £700.

**CORNWALL.**—Returns £350; suit Dentist well; price £250.

**STAFFS.**—Returns £650; Prescribing and Retail; large house and shop; £500 or valuation.

**LONDON, E.**—Very profitable Retail, returning £400, with Post Office worth £100 per annum; low rent; price £420.

**MIDLANDS.**—Retail and Gilbey's Agency; returns £1,200; at valuation about £500.

**SHEFFIELD.**—Returns £6 week by apprentice, can be doubled by personal attention; price £150, of this £50 can remain.

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**KENT (Coast).**—Good class Retail and Dispensing Business; returning £1,000; very profitable; steadily increasing; handsomely-fitted shop; capital position; good house at moderate rent; price £800.

**HOME COUNTY.**—Death vacancy; Retail, Dispensing, and Prescribing Business; returns £800 under manager, capable of increase; good house and garden; price £550; £250 can remain.

**WEST OF ENGLAND.**—Retail, Dispensing, and Agricultural trade; returns £1,300, with good profits; same hands many years; good house and garden; price £850, or small premium and valuation.

**SURREY.**—Good-class locality; first-class Retail and Dispensing Business; returns £800, at exceptionally good prices; handsome Pharmacy; price £750; furniture may be had at valuation.

**LANCASHIRE.**—Large town; Retail, Dispensing, and Prescribing; returns £1,300, increasing yearly; low rent; good house and premises; price £1,000, or offer; valuation terms arranged.

**LEICESTERSHIRE.**—Good market town; Retail, Dispensing, and Prescribing; well situated in market place; returns £800, increasing; good house, garden, greenhouse, &c.; price about £700.

**WARWICKSHIRE.**—Good-class Retail and Dispensing Business; same hands 34 years; returns £500; very profitable, and scope for increase; good house and garden; well-fitted shop; price £350.

**MIDLANDS.**—Unopposed Retail and Prescribing Business; returns £400; net profit £170; low rent; good house and garden; well fitted and stocked shop; price £250; steadily increasing; safe investment.

**LONDON, S.W.**—Retail and Dispensing; full prices; returns £500; same hands 23 years; elegant fittings by Trebble; price £400.

**LONDON, N.W.**—Genuine Retail and Prescribing trade; returns £450; unopposed position; good house; price £175.

**LONDON, W.**—Retail and Prescribing trade; returns £6 weekly, as a branch; double-fronted shop; price £120.

Particulars of any of the above sent free on application.

Other Businesses, Town and Country, from £100 to £5,000.

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## BUSINESSES FOR DISPOSAL.

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**RANGOON** (British Burmah).—For disposal, a Chemist and Druggist's Business; one of the leading haunts; excellent position; capable of great increase; proprietor desirous of retiring on account of failing health; references. Address, in first place, Godher, 79 Marchmont Road, Edinburgh.

**LONDON SUBURB.**—Light Retail and Dispensing Business, in a rapidly-increasing neighbourhood; established 12 years; returns £320; owner retiring on account of advanced age; every investigation allowed; price £230. X. Y., care of Messrs. Meggeson & Co., Miles Lane, Thames Street, London.

**THOMAS TOMLINSON & SON**, Chemist's Valuers, Manchester, have for disposal a nice little Business in a manufacturing town about 8 miles from Leeds, doing £9 a week under management; established 50 years, rent £40, with good house and well-fitted shop; incoming £275 to early purchaser.

## Messrs. CROCKER & CO.

Trade Valuers, Transfer Agents, and Accountants,  
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**DEVON.**—Old-established Retail and Dispensing, with own Specialties; returns £600; rent £50; price £450; good house and garden.

**MIDLANDS.**—Light Retail and Dispensing; returns £500; price £200; no heavy trade and no patents; 8-roomed house, with private entrance.

**WEST OF ENGLAND.**—Busy town.—Light Retail and Dispensing trade; returns £500; price £420; plenty of scope to do more than double the trade.

**LANCASHIRE (Seaside).**—Good-class Retail and Dispensing; returns £520; price, valuation of stock and fixtures; large and handsome Pharmacy, standing in best part of town; worth attention.

**SURREY.**—Light Retail and Dispensing; returns £400; very low rent; price £375; large and convenient house, with nice garden.

**HOME COUNTY.**—Family and Dispensing trade, with Post Office attached; returns over £800; price about £600; 10-roomed house and garden.

**MANCHESTER.**—Light Retail and Dispensing trade; returns £400; price £220; very few patents sold; strongly recommended; large house.

**LANCASHIRE.**—Good-class General Country trade; returns £1,300; price £1,000; very low rent; handsome Pharmacy; double-fronted.

**KENT.**—Death Vacancy.—Retail and Dispensing; returns £350; rent £25; price £200; single-fronted shop, well stocked and nicely fitted.

**WEST OF ENGLAND.**—Fashionable Health Resort.—Old-established Retail and Dispensing; returns £1,200; price £1,200; good house, &c.

**LONDON, S.**—Good class Retail and Dispensing; trade returns £500; low rent; price £350; capital position in marketing thoroughfare.

**LONDON, N.**—Old-established Retail, Prescribing, and Dispensing; many years in same hands; returns £570; price £500.

**LONDON, S.E.**—Retail and Prescribing trade; unopposed position; returns £500; price £400; rent £40; good house, &c.

**LONDON, S.E.**—Suburb.—Retail and Dispensing; handsomely-fitted, double-fronted shop; returns £1,400; rent £50; price £1,100; or a Partnership would be entertained, with a view to present owner retiring.

**LONDON.**—Partner wanted in a Manufacturing Business doing with Chemists, Drysalers, &c.; capital required about £1,000; an energetic man fond of travelling would find this an excellent opportunity for profitable investment of time and capital.

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## BUSINESSES FOR DISPOSAL—Continued.

**£700.**—On the banks of the Thames—Good-class Family and Dispensing Business, returning £800 a year, very profitable; rent £35 on lease; very nice house, good stock and fixtures; satisfactory reasons for selling. Full particulars can be had from R. A., 63 Great Portland Street, W.

**£250.**—London Suburb.—Retail and Prescribing Business, in a good thoroughfare; very much neglected, owing to old age and lack of energy; well-fitted in mahogany; Post Office attached brings in £60 yearly; good house, long garden. J. S., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.O.

**UNOPPOSED Village Business** in the South of England; returns £650; full prices for everything; convenient house and good garden; immediate sale desired, taking larger business; price £450 or offer; every investigation allowed. Apply, "Pepsin," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.O.

**DISPENSING and Light Retail Business** (yearly increasing) in a most attractive locality 25 miles from London; handsomely-fitted shop, well stocked; excellent house, garden; cash required about £900; owner retiring; introduction; references given; principal only. Apply, G. G., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**CAMBS.**—In the best agricultural district in England, a thoroughly sound and old-established Business; very profitable; returns £1,400 to £1,500; price about £1,350. Also property attached, in perfect condition, consisting of four good houses; rental £70; price about £1,200. "Substantial," Harveys, 6 Giltspur Street; or Francis, 38 Southwark Street.

**BUSY main road, densely-populated neighbourhood, S.E.**—Long lease; well-fitted shop and 9 rooms; taking under management £255, easily increased; rent £60, let off £40, more could be let; price for goodwill, lease, fittings, and about £175 well-selected stock, £200, or good offer. "Invigorine," Office of THE CHEMIST AND DRUGGIST, 42 Cannon St., E.C.

**A RETAIL and Prescribing Business** in large manufacturing town, populous district; a good business up to £1,000 would be done by a person with small capital; price only £60 (no fixtures to take to); excellent position for Surgeon, as open Surgery and private cash practice. "Bon-a-side," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.O.

**£225.**—Hampshire.—Retail and Prescribing Business for immediate sale, returning £8 to £10 weekly, with exceptional opportunities for doubling the trade; rent only £35; excellent position, opposite market and station; good house; fortune to steady man; trial allowed. "Hants," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.



**WANTED**, Manager, qualified, single, aged 27 to 30 good references, photo, height, and usual particulars, for first-class Dispensing business in Liverpool suburbs. R. T. Richardson, Sefton Park Pharmacy, Sefton Road, Liverpool.

**QUALIFIED** Assistant, accustomed to first-class Dispensing and select Retail; gentlemanly and trustworthy, good references, and holding a permanency. Apply, with full particulars, to G. F. Turner, Chemist, Clifton, Bristol.

**ASSISTANT**, aged about 24; Minor qualification; must be a reliable Dispenser, write a good hand, and have had experience in the best class of trade. Apply, with full particulars and enclosing carte, to J. H. Pearson, Nottingham.

**WANTED**, by the middle of March, a gentlemanly Assistant, aged about 22, for a small branch, where time for rendering is given: a day a week and alternate Sundays off duty; abstainer preferred. J. H. Mason, Bexley Heath.

**WANTED**, qualified Manager for branch, in Yorks; to live on the premises; married; age about 30; able to Extract; one year knowledge of West Riding class of business preferred. Address, "Tim," care of Southall Bros. & Barclay, Birmingham.

**WANTED**, a qualified Junior Assistant for Light Retail and Dispensing; must be a good Counterman, and take an interest in the proprietaries; outdoors; no Sunday duty. Send particulars, reference, photo, salary, &c., to Woollett, Chemist, Taunton.

**WANTED**, Manager, qualified, married, to live on premises, Mixed Retail, Prescribing, with Tooth Extraction, and small quantity of prints; must be sober, pushing, and obliging; successful service and lead to interest in business. Apply, 10 Hawkshead Street, Southport.

**QUALIFIED** Assistant; indoors; aged about 24; middle height; accustomed to superior class of business; commencing salary £60; one intending a permanency would be treated with. Apply person-to-person, mornings 10 to 12, evenings 6 to 8, White & Son, Park Terrace, Kent's Park.

**WANTED**, at once, a good Junior, recently qualified preferred, for Light Retail and Dispensing; must be a good Counterman, and an interest in shop and proprietaries; indoors. Usual particulars as salary, &c., to save unnecessary correspondence, to A. E. Breeze, 100 Cannon Road, Birkenhead.

**WANTED**, early in March, for a month a qualified Assistant, accustomed to first-class trade, well up in Dispensing, with prospect of permanency if desired; good personal character indispensable. Apply, stating age, height, experience, references, and remuneration required, to J. H. & Son, Southampton.

**AVELLER**.—Gentleman with experience, energy, and tact required to represent a firm of provincial Wholesale Druggists; one living a portion in the Midlands, North of England, and South Wales preferred; exceptional references required. A. B. C., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**WANTED**, immediately, several reliable men to take sole district agencies for a genuine Speciality; preference given to those with a cash connection among Chemists, Veterinary Surgeons, and Patent Medicine sellers. Apply, with references, to 246/13, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**WANTED**, at an early date, thoroughly reliable and steady Indoor Assistant, of good address, active and obliging, accustomed to class Dispensing, General Retail, and Family Trade. Send particulars as to age, height, salary required, former experience, photo (if possible) to be returned, 11 Rose Crescent, Cambridge.

**WOMAN**.—Wanted, in a Pharmaceutical Factory near London, a competent experienced young woman as above; must have a good knowledge of Drugs and of the putting up of Specialities, and be able to visit various departments; liberal wages. Address, "Caput," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**AUSTRALIA**.—Qualified Assistant; thoroughly well up in Dispensing and Counter work; sober and trustworthy; and not over 35 years of age; not less than 2 years' engagement; first-class saloon passage paid out; salary £130 per annum. Apply, "Australia," care of Street & Co., Cornhill, London, E.C.

**AVELLERS** or Local Agents wanted for the Midland Counties, with connection amongst Chemists, Ironmongers, Saddlers, &c.; whole of time; good commission to suitable persons; satisfactory references and security required. Address, with full particulars, to S. J., of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**YOUNG** man wanted by a large firm, who has had experience in Dispensing and weighing drugs and poisons; he must have passed his examination in pharmacy and be able to keep a complete set of references will be required. Apply by letter, stating age, salary, experience, to Y. M. W. & Co., care of Crossley, Moir & Co., Advertisers, 57A Coleman Street, E.C.

**LABORATORY**.—Old-established firm of London Druggists have a vacancy for a young Chemist who has had a good scientific education followed by a few years' experience of the manufacture of extracts, chemicals, and other P.B. preparations, as well as of the purification of chemicals, &c.; liberal terms to a suitable applicant. Address, stating age, experience, and salary required, H., Lynwood Villa, Beaconsfield, New Southgate.

**WANTED**, by a leading firm of Manufacturing Pharmacists, an energetic experienced Traveller, for the North of England and Ireland; must be a man of tact and gentlemanly bearing, and have good position amongst Chemists in those districts; the very highest remuneration will be required; remuneration from £300 to £400 per annum and is according to ability; applicants are requested not to forward telegrams or stamped envelopes. Address, "Premier," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**THOMPSON**, Pharmaceutical Chemist, Putney, S.W., is in immediate want of a smart Junior Assistant; personal application preferred.

**IMMEDIATELY**, a steady, obliging Assistant; qualified preferred; indoors. Apply, with usual particulars, J. Fawcett, Beblington, Birkenhead.

**IMMEDIATELY**, an Assistant, about 23 or 24; well up in Dispensing. If writing send photo to J. W. Taplin, 4 Fortune Gate Terrace, Hurlersden, London, N.W.

**WANTED** immediately, a good Junior Assistant, in a first-class Country business. Apply, stating age, height, and salary required, to Perks & Llewellyn, Hithlin.

**JUNIOR** wanted, aged about 20; must be a good Counterman, obliging to customers; state salary required (outdoors), when disengaged. Lewis, 87 Fishergate, Preston.

**JUNIOR** or Improver, at once, in comfortable home, with time for study. Apply, personally if possible, to D., 6 Townshend Road, North Gate, Regent's Park, N.W.

**JUNIOR** Assistant, outdoors; good Counterman, and accustomed to brisk business. Apply, stating age, height, and salary required, enclosing photo, Ward, Chemist, Haymarket, Leicester.

**GOOD** Junior Assistant; must be a quick, neat, and accurate Dispenser; Senior and Junior also kept. Apply, with full particulars, stating height, and enclosing photo, to John Rice, Chemist, Newmarket.

**WANTED** (shortly), a Minor in a good-class Dispensing business; two others kept; must have had some experience in Dispensing. Apply, with usual particulars, to Shrubsole & Son, Town Hall Square, Chester.

**IMPROVER** or Junior, immediately, for Mixed business with small Wholesale; state age, height, salary, &c., with reference, and photo if convenient; abstainer preferred. Address, Spurway, Chemist, Kidderminster.

**AT** once, competent Counterman (indoors), about 23, for brisk cash business; liberal salary to an experienced and pushing hand. Apply, stating full particulars, to J. H. Lewis, 22 and 24 Great Portland Street, W.

**WANTED**, Junior in Light Dispensing business in the Midlands; one with some knowledge of Homoeopathy preferred. Apply, with usual particulars, to "Alpha," Messrs. Epps & Co., 39 Bishopsgate Street Within, London.

**QUALIFIED** Assistant, to manage Branch; married man without family not objected to; must be able to Extract Teeth, and work up a neglected business. Apply to J. W. Feltwell, 91 Hammersmith Road, West Kensington, W.

**A** RELIABLE Man to push and work up a Branch Business in middle of Lancashire town; with knowledge of store business an advantage. Address, with full particulars, 66/5, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**WANTED**, an Assistant for Light Retail and Dispensing business. Send full particulars, age, height, salary required, and if possible enclose carte (which shall be returned), to T. J. Clark, Broadway Pharmacy, Crouch End, N.

**LABORATORY**.—An Assistant to take charge of a small Stereotype Laboratory; must be experienced in making Pharmaceutical preparations, and have a knowledge of analysis. Apply, A. H. Heaton & Co., 38 Southwark Street, London.

**WANTED**, Manager (married), for a Light General Retail Branch; must be strictly temperate. Reply, stating qualifications, salary expected with free house, &c., references, and photo, if possible, to H. Hylton Taylor, Chemist, Middlesbrough.

**WANTED**, a Junior Assistant; not under 21; must be a good Dispenser and accustomed to Light Retail. Apply, stating age, experience, and salary required, with references, enclosing carte if convenient, to E. Silk, Teignmouth, South Devon.

**WANTED**, qualified Manager for first-class Homoeopathic business in watering-place; to reside on premises; abstainer preferred. Address, with photo, stating salary, &c., to "Homoeopathy," Office of THE CHEMIST AND DRUGGIST, 42 Cannon St., E.C.

**A** S Junior; Minor qualification, and able to give good references; a comfortable home and gentlemanly occupation, with time for study and recreation. Write, stating usual particulars, or call between 11 and 12 A.M., or 6 and 9 P.M., 1 Jermyn Street, S.W.

**WANTED**, for the country, a Working Warehouseman, with experience in putting up wholesale orders; applicant to give references, experience, and say salary required. Y. Z. O., care of Wright, Layman & Finney, 50 Southwark Street, London.

**ABOUT** the beginning of March an active, steady, and obliging Junior Assistant, outdoors, who has been accustomed to a brisk Retail; several apprentices and two porters kept. Apply, with full particulars, including references and photo, to Grimble & Kent, Pharmaceutical and Dispensing Chemists, Boston.

**WANTED**, a competent qualified Assistant (about 25) as Senior; outdoors; must have had experience in a good-class Country business; one desirous of a permanency preferred. Apply, with full particulars of age, height, salary, &c., to Dunhill & Stiles, Pharmaceutical Chemists, Doncaster.

**WANTED**, by provincial Wholesale house, an active careful man, not afraid of work, to take chief part in putting up wholesale orders; other men under him; permanent situation to suitable man; state age, experience, and wages required. "Bromide," care of Horner & Sons, Mitre Square London.



**FOR SALE**, a Chemist's Business in Nottingham; corner shop, well fitted; few patents; returns £8 10s. weekly; rent £30, house and shop; price £200. Apply, R., care of Hirst, Brooke & Hirst, Leeds.

**NICE** Chemist's and Druggist's Business for sale; established over 11 years; an excellent opportunity for Chemist and Dentist; no dentist within 20 miles round; shop handsomely fitted; satisfactory reasons for disposal; price moderate. Apply to S. B., 62 Linsley Road, Skegness.

**PRESCRIBING** and Light Retail, in busy Birmingham suburb; returns £400, fully built profit, good prices, no patents; excellent house; rare opening for a pushing man, as vendor away half the day; with whole attention would immensely improve; price £300; vendor entering medical profession. "Medicus," Wyleys, Coventry.

**£550.** Death vacancy; Market Town in Kent; same handle 19 years; returns last 3 years average £845; large corner shop; excellent position; good house, garden, &c.; part of purchase money may remain on security. Apply, stating cash at command, to "Widow," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**LANCASHIRE.**—On sale on most advantageous terms, Retail, Dispensing, and Prescribing Business; handsomely-fitted shop; good house; good position in main street; satisfactory reasons for selling; price, valuation of stock and fixtures; splendid opportunity for pushing man desirous of commencing. Address, "Chemist," 10 Church Street, Preston.

**£195** will purchase a Business worth £340; all ready money; nominal rent; side door, large house; will improve during the year for reasons explained during interview; would suit a young man just commencing, or older man without family; well worth attention; under management. Kay, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**FOR** immediate disposal, a well-established Business in Staffordshire potteries, centrally situated in main thoroughfare; present returns £740, and increasing; rent £23, of shop and dwelling-house, on lease; an excellent opening; principals only treated with. For particulars apply, "Conveyancer," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**FOR** immediate disposal, a genuine Light Retail, Dispensing, and Prescribing Business in a healthy, populous, and rapidly increasing neighbourhood; shop handsomely fitted and well stocked; large, convenient house at moderate rent, £45; returns last year, £715; price £700, vendor retiring. Address, "Rhef," Messrs. Evans, Lescner & Webb, Bartholomew Close.

**FOR** sale—South-East London, 10 miles out—increasing Retail, Prescribing, Dispensing Business (with very profitable small Wholesale), and Branch; splendid positions of flourishing suburb, with large works; handsomely-fitted; valuable lease; total returns £1,013; together £660, separately £625 and £89. "Beta," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**GENUINE** Chemist and Druggist's Business, chiefly Prescribing; only wants seeing; small but remunerative; incoming low; sure and easy living for anyone; double-fronted shop; good house (with side entrance), yard, &c.; receipts about £300; no cutting or opposition; populous and increasing neighbourhood of Penarth Dock, where a large shipping trade may be cultivated. Pearson, Caroline Street, Cardiff.

**LONDON.**—Ready-money Retail and Dispensing; returns over £900 almost, under management; gross profits 50 per cent.; returns can be largely increased with personal attention; every investigation allowed, and trial if desired; vendor retiring from business; less than one year's returns required. Apply, "Vinolia," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**THOMAS TOMLINSON & SON**, New Cannon Street, Manchester, have for disposal Chemist's Businesses—at Preston, about £700, returns near £1,000; Salford, £300, returns £800; Liverpool, £200, returns £350; Wales, £400, returns £900; Stalybridge, £400, returns £800; Nottingham, £500, returns, with wines, £1,100; Leicestershire, £250, returns £360; Hyde, £220, returns £250; and several others.

**£100.**—Small genuine Retail and Prescribing, at 343 Upper Street, Islington, opposite the Agricultural Hall; takings over £20 in January under management, principal should do double, rent low; profits over 60 per cent.; good working order; splendid position for advertising; open to an offer for the entire to take away. 110/12, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

## BUSINESSES WANTED.

**A QUALIFIED** Chemist, actually owner of a large shop in Hamburg, being desirous on account of family matters to return to London or suburbs, is open either to take over a small Business, or to enter into Partnership or a situation of trust. Please address Mr. First Nest, Nestr. 4, Hamburg.

**WANTED** at once, a light Retail and Dispensing Business in provincial town within 100 miles from London, and returning about £700; must bear investigation, and have a good house. Send full particulars, in confidence, to "Major," care of Mr. Blagdon, 43 Hanway Street, London, W.

## APPRENTICESHIP.

**H. H. PARLBY**, Dispensing and Family Chemist and Wholesale Druggist, opposite Albert Hall, Swansea, requires an Apprentice; terms moderate.

## SALE BY AUCTION.

**TO** Chemists, Druggists, and others. Messrs. Newland & Hunt offer for Sale by Auction at the Westgate Hotel, Newport, Mon. Wednesday, March 4, 1891, at 3.30 in the afternoon, all that valuable Business Premises and Dwelling-house, being Nos. 80 and 81 Commercial Road, Newport, Mon., with the Goodwill of a Chemist and Druggist which has been successfully carried on for many years, by the late H. Paulkner, Esq.; also the Three Cottages or Dwelling-houses adjoin which bring in a weekly rent of 17s.; the situation is one of the most important in the town, and commands a large shipping business.

Further particulars may be had from the Auctioneers, Newport, Mon.

## FOR SALE.

**BARGAINS** in Shop-fittings. For sale, one 12-ft. range of second-hand pine drawers, with gold labels and glass knobs, and lock, under, 5/; one 12-ft. range new mahogany drawers, with glass labels, knobs, 9/; one 9-ft. second-hand counter, panelled front, 40s.; one ditto, 30s.; one 8-ft. ditto, mahogany top, 50s.; one 6-ft. mirror case dispensing-screen, 6/ 10s.; one ditto, new, 6/; one mahogany bent-g-toothbrush-case, 25s.; one 4 ft. 6 in. mahogany wall-case, second-hand, 6/; four 4-gallon pear shape earboys, cut stoppers, 12s. each; four gallon ditto ditto, 16s. each; four 8-gallon ditto ditto, 20s. each; 180 gold-labelled rounds and jars, 8/ 5s.; 24 4-lb. best pink jars, labelled, 5s. each; 24 3-lb. blue jars, labelled, 2s. each. R. Tonlinson Sons, Bond Street, Birmingham.

## SITUATIONS OPEN.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

**JUNIOR** Assistant for Dispensing business; indoors. H. J. Deane, Beckenham, Kent.

**ABOUT** the middle of March, a qualified Assistant accustomed Dispensing. Bright, Chemist, Beckenham.

**QUALIFIED** Assistant; good-class Retail, Dispensing; indoors salary £50. Apply, Carveth, Chemist, Plymouth.

**JUNIOR** able to speak Welsh, to manage a small branch; must be good character. Apply, Hughes, Chemist, Bethesda.

**ASSISTANT**; conversant with the Welsh language preferred. Apply with full particulars, to W. L., 26 High Street, Carnarvon, N. Wales.

**ASSISTANT**; qualified; indoors; salary 20s. a week. State age, height, and references to C. G. Breadner, Chemist, Caeetha Manchester.

**WANTED**, qualified Assistant for good-class country business; 30 hours; no Sunday duty. Send photo, state salary and references to James Bates, Wellington, Salop.

**PILL COATING** (one or more seeking permanency).—A young man accustomed to pearl and gelatin coating of pills; state experience and salary. Wand, Pill Factory, Leicester.

**WANTED**, by a firm of Surgeons, at once, a thoroughly qualified Dispenser; must be strictly sober; salary £10 a year, outdow Address, W. F. Hearnden, Sutton, Surrey.

**TO** Dispensers.—Wanted, at once, a qualified man (outdoors); 30 hours, no Sunday duty. Apply by letter, stating age, experience and salary required, to J. W. B., 136 Queen Victoria Street, E.C.

**A QUALIFIED** Assistant; about 24; accustomed to first class Dispensing and Retail; indoors. Apply, stating age, height, salary and references to J. Munday, Chemist, 1 High Street, Cardiff.

**IMMEDIATELY**, an Assistant (Minor), not over 28, for good-class country business. Full particulars, and photo if convenient, to S. B. Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**FOR** Japan, immediately, qualified Assistant, about 25; first-class experience and references indispensable; liberal terms. By letter only, Dakin Brothers, 2 and 3 Creechurch Lane, Leadenhall Street.

**WHOLESALE.**—Good Junior hand wanted for Wet Counter at once; must have had some previous experience. Apply, stating age, experience and references, to Furst Company, Union Street, Bristol.

**QUALIFIED** Assistant; married; must be a good Counterman; some experience, references, and salary required in first letter; none but first-rate men need apply. "Pharmacy," Woolley, Sons & Co., Manchester.

**AS** Traveller, to represent a good firm of Chemists' or Druggists, Sandviesmen, for Wales, &c.; active, of good business habits, and the highest references. Apply to Edwards, Hyfrylle, Penrhynendrach, Wales.

**IMMEDIATELY.**—Dispenser wanted for City; hours 8.45 to 7; must have Minor qualification and good references. Apply to Manager Drug Department, New Civil Service Stores, 122 Queen Victoria Street, E.C.

**BRITISH HONDURAS.**—Qualified Assistant required; young and of good address; 3 years' agreement; passage paid out; £75, £40 and £120, indoors. Apply to "Honduras," care of Street & Co., Oorah, London, E.C.



## SITUATIONS WANTED.

1s. for twelve words; 6d. for every six words beyond.

**JUNIOR**; aged 19; 4 years' experience; salary £25. J. Butler, 42 Great Bridge, Tipton.

**MANCHESTER**.—Outdoors; qualified. F. B., 60 Sycamore Road, Handsworth, Birmingham.

**MANAGEMENT**, temporary, with view to purchase. "Rhet," 24 Kilburn Square, Kilburn, N.W.

**MANAGER**, branch; qualified; or good Assistantship; 23; 9 years' Bates Allenheads, Alledale, Northumberland.

**WANTED**, post, Dispenser, Chemist, or Surgeon, a few hours daily; good references. "Student," 4 Merriok Square, Borough, S.E.

**ASSISTANT**; 25; tall; experienced; excellent references; time for reading; West end. 14 Market Place, Upton Park, E.

**SITUATION** wanted; part time preferred, or with time for study; Minor. D. W., 53 Gloucester Place, Portman Square, W.

**YOUNG** man (19) seeks situation at Wholesale or Manufacturing Chemist's; 6 years' experience. Jones, 25 Hall Place, W.

**JUNIOR**, 6½ years' experience; outdoors preferred; references. "Auranti," Hollingworth, Pharmacist, Stanland, Yorkshire.

**ASSISTANT**; qualified; indoors; 23; Yorkshire preferred; disengaged March 7. Brown, Fern Cottage, Caistor, Lincolnshire.

**MANAGER**; disengaged end of March; married; can be seen here. Address, "Kaolin," Bridge Pharmacy, Harrow, near L.N.W.Ry.

**MANAGER**, experienced, seeking permanency; Midlands preferred; excellent references. E. E. Hanley, 20 Blucher St., Birmingham.

**ASSISTANT**; part time; good references; in or near London. "Sm.lax," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**CHEMIST** (qualified), 23 years of age, 6½ years' experience, desires situation. 110/2, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**JUNIOR**; first-class experience; good references; South Coast preferred. E., care of Bellamy & Wakefield, Pharmaceutical Chemists, Birmingham.

**MANAGER**; qualified by exam.; good Prescriber and pushing man; abstainer; town or country. Bonner, 1 Newton Street, High Holborn, W.C.

**WANTED**, situation as Traveller; good references; 20 years in the Chemist business; 10 years in last place. H. W., Bielsbeck, Hotnam, Brough R.S.O.

**MANAGER**; M.P.S.I., Irish qualified; 9 years' experience, 2 as Manager; thoroughly competent. S. R. H., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**ASSISTANT**; qualified Minor and Apothecary; accustomed to good-class Dispensing; aged 23; height 5 feet 10 inches; disengaged. W. C., 14 High Street, Spennymoor.

**EVENING** employment; accurate Dispenser, good Prescriber and Teetu Extractor, Midwifery; disengaged 6 P.M. "Cymlin," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**ASSISTANT**; aged 22; height 5 feet 6; Wholesale or Retail; Extractor; not afraid of work; good references; disengaged March 1. J. A. W., 393 Berridge Road, Hyson Green, Nottingham.

**MARCH 1**.—As Manager, with view to purchase, or Temporary for whole or part time; London or near; aged 23; well up in Dispensing. X., care of Mr. Hulland, Framlingham, Suffolk.

**MANAGER**, Branch or otherwise; qualified; married; aged 27; varied experience; excellent references; Liverpool or district preferred; disengaged shortly. W., 1 High Street, Cardiff.

**WHOLESALE** Drug trade.—Traveller; 9 years' experience amongst Medical Men and Veterinary Surgeons in the North and Midlands; highest references. Fletcher, 115 New Park Road, Salford, Manchester.

**STUDENT**, good Prescriber, Dispenser, and Extractor, desires evening employment; ten years' experience; excellent references. Address, "Student," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**GERMAN**, certificated Chemist, conversant with Chemical, Drug and Tea branches of business, with knowledge of English pharmacy, requires a situation; good references given. Apply, Kunze, 29 High Street, Hampstead.

**AS** Traveller or otherwise to good Drug or Chemical house, by a qualified Chemist and Druggist, of considerable experience; aged 38; healthy, active, of good business habits, and an abstainer; first-class references. Elliott, Nursery, Exeter.

**TRAVELLER**.—Advertiser, experienced, willing and energetic, having already small connection, wishes to represent firm of Chemists, Oilmen, or Druggists' Sundriesmen for North of England. Apply to "Gusludum," 26 King Street, Carlisle.

**IMPROVER**, aged 23, full curriculum, reliable Dispenser, thorough knowledge of drugs, will give services to good firm in exchange for comfortable home, small salary; character bears strictest investigation. "Statim," care of Andrew, 9 Bishopton Lane, Stockton-on-Tees.

**TO** Manufacturing Chemists.—Junior Partner, Works Manager.—A Young man, with Laboratory and Works experience, possessed of some capital, is desirous of an opening where both could be advantageously employed. Apply, "Scot," care of John Miller and J. M. Steel, 71 Queen Street, Glasgow.

**PART** or Whole Time Dispenser to Surgeon. B. L., 45 Wharton Street, Lloyd Square, W.C.

**OUTDOORS**; Junior; good references; 22. "Statim," 171 Borrett Road, Manor Place, Waiworth.

**TEMPORARY**; aged 27; qualified; experienced; highest references. "Chemicus," 43 Lister Street, Hull.

**LOCUM**; Trinity Square, Llandudno; disengaged March 2. Present address, "Lootin," 4 New Street, Mold.

**JUNIOR** (24), or manage branch; Extract Teeth; unqualified. "Chemist," 28 Welbeck Street, Manchester.

**ADVERTISER** (26) requires situation; Wholesale preferred. A. B., 23 Shrubland Grove, Queen's Road, Dulston.

**MANAGER** or Dispenser; qualified; reliable; 33; married, no family. "Chemicus," Wadenhoo, Oundle.

**SITUATION**; outdoors; married; unqualified; experienced. K., Rose Cottage, Chipping Hill, Witham, Essex.

**MANAGER** or Temporary; qualified; references (45). Williams, Chemist, 70 Ledbury Road, Bayswater, W.

**JUNIOR** Clerk (19) requires situation; town or country; good references. F. E. S., 23 Baddow Road, Chelmsford, Essex.

**ASSISTANT** (26); unqualified; 10 years' experience; outdoors preferred. W. W., 11 Dorothy Road, Lavender Hill, S.W.

**H. SEYMOUR**, 37 Milk Street, Bristol, takes occasional charge in absence of Proprietor, or illness, &c.; disengaged.

**BRANCH** Manager; 9 years' experience; qualified; single; good references. L., 21 Bradshaw Street, Moss Side, Manchester.

**AS** Assistant; aged 24; Prescriber, Extract Teeth; good references. Arthur Johnson, 17 Longvillio Road, Newington Butts, S.E.

**LOCUM-TENENS** or permanent; registered; married; first-class references. "Caemist," 252 Coleman Street, Wolverhampton.

**OUTDOOR** Assistant, or as Dispenser to Surgeon; qualified; town and country experience. O. C., 60 Kellett Road Brixton.

**MANAGER** or Senior, for permanency; qualified; single; aged 23; 13 years' experience. J. F., 16 Church Street, Greenwich, S.E.

**AS** Assistant, in London; West-end experience; aged 25; Major qualification; disengaged. A. V., Redbridge House, March, Cambs.

**PART-TIME**, in London, for board and lodge; good Dispenser and Counterman. Howell, Pantruthin, Pencoe, near Bridgead, Glam.

**INVOICE** Clerk seeks situation: knowledge of shipping and Spanish; 14 years in Drug trade. "Rex," 73 Allen Road, Stoke Newington, N.

**MANAGER** or Senior; qualified; over 2 years' West end and 6 months' Paris experience; aged 26. R. R. Turner, Newport, Brough, Yorks.

**JUNIOR**; aged 20; 4 years' first class London experience; time for study required; moderate salary. E. M. P., 33 Denbigh Street, S.W.

**QUALIFIED** Assistant; middle-class Retail and Dispensing; Midlands or near; 10 years' experience; disengaged early March. "Chemist," Oakengates, Salop.

**ASSISTANT**; unqualified; married; long experience; disengaged Monday next; temporary or permanent. R., 147 Ladypool Road, Sparkbrook, Birmingham.

**FIRST-CLASS** business man, Prescriber and Extractor, married, requires situation; two years' reference. "Drugs," 55 Miller Street, Aston Road, Birmingham.

**AS** Assistant, with view to taking share in small Wholesale or Dry-saltery; well up in Drug trade; 25; single. Arthur Newton, Clarence Road, Stalybridge.

**ADVERTISER**, who calls upon all Chemists on the South Coast, is open to accept engagement, on commission, from a Drug or Sundries house. "Drugs," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**AS** Chemist's Assistant or Surgeon's Dispenser; qualified; town or country; can Extract Teeth; aged 32; good references. "Vigilans," 154 Great Dover Street, London, S.E.

**MANAGER** or Senior in high-class business; 24 years' country and West-end experience; aged 39; permanency; town or country. A. B., 111 Great Portland Street, W.

**WHOLESALE**.—Pharmacist (qualified) seeks position, having had varied experience in London Wholesale and Retail businesses, and possessing Analytical qualifications, solicits correspondence and interviews. O. H. Victor, 24 College Street, London, S.W.

**ANYONE** requiring the services of a qualified Chemist for a few weeks may be treated with at an advantage; advertiser going into business and has a little time to spare. Apply, "Malva," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

## MISCELLANEOUS.

**AGENCIES REQUIRED FOR DRESDEN**.—A Dresden Agent of much experience in introducing New Specialities, and well known throughout Saxony, wishes to represent some English firms in the Drug, Chemical, and Technical line; highest references. Address, "Dresden," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.



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[See also p. 41.]



of the law and of the Pharmaceutical Council. They registered themselves as a limited company on January 1, and their qualification was duly recorded in this journal on January 10. The Pharmaceutical Society have recovered penalties for what was done before the date of registration, but if the company only take precautions in selling poisons, which their lawyer has evidently explained to them, they can run half-a-dozen more shops if they like, without any fear of his Honour before their eyes. The judge saw very clearly, and very definitely declared, that it was for the public benefit that the Pharmacy Act should be enforced. His language was unusually decided, and it may be assumed that he would hardly consider that the public were in any way safeguarded by the trumpety but legally-sufficient trick of registration at Somerset House. Any ordinarily-competent man, even though he might be a legislator, would agree with the learned county court judge if the question came before him. And yet we have had the curious spectacle of the President of the Pharmaceutical Society going up and down the country asserting that a claim of amendment based on such a view would not be listened to by any members of Parliament. And we are to have a Bill introduced which practically tells the country that the Pharmaceutical Society does not think the matter of sufficient importance to be dealt with.

#### THE B. P. ADDENDUM.

In the recent proceedings regarding the sale of milk of sulphur, a somewhat amusing incident happened while the analyst was under cross-examination. The solicitor for the defence wished to make it clear that when the Pharmacopœia meant a certain thing to be supplied which was known by a popular name that name was given under the pharmacopœial one as a synonym. He instanced the case of paregoric, and asked his witness if that was not a synonym for camphorated tincture of opium in the 1885 Pharmacopœia. The witness turned up the copy of that Pharmacopœia which he had with him, and promptly replied "No." The solicitor insisted that it was so in his copy, and after looking into the matter nobody could understand it, and the court was left in a maze about it. The fact is, of course, that in the 1888 reprint of the Pharmacopœia synonyms for tinctura camphora composita and for tinctura opii were added, and reference to the pre-prefatory notice in the 1888 copy would have shown this. But the "slip" was excusable, and it recalls a rather important point in regard to which issue of the 1885 Pharmacopœia is the proper legal standard. There were the original and three reprints of it, and in the latter were many alterations and corrections. The General Medical Council have power to alter, amend, and republish the Pharmacopœia "as often as they shall deem it to be necessary"; and by a later Act the right of "publishing, printing, and selling" is reserved to the Council, evidence of publication being notice in the *London, Edinburgh, and Dublin Gazettes*. It is moreover enacted that "a copy of the said Pharmacopœia printed by such person as may be named in the said notice, or in any other notice published in the said *Gazettes*, as authorised by the General Council to print the said Pharmacopœia, shall be admitted in evidence as being the Pharmacopœia directed to be published by the above-mentioned Act." In our innocence we are apt to suppose that the Pharmacopœia of 1885 will stand good as evidence until we have the product of another revision, but in December, 1888, a notice appeared in the *Gazette* to the effect that "a reprint of the British Pharmacopœia of 1885 has been published under the direction, and by the authority, of the General Council of Medical Education and Registration

of the United Kingdom, and that the same has been published by Messrs. Spottiswoode & Co., &c. There is a reprint dated January, 1890, but we do not find any notice of it in the first quarter's *Gazette* of that year, and we take it that the reprint of 1888 is the authoritative standard. This would be hard upon the possessors of earlier imprints if the Medical Council did not offer them the means of correcting their copies by publishing also a list of corrections and alterations, such as was compiled in 1888, and mentioned in the notice alluded to above.

As to how far these considerations apply to the "Additions" which have recently been published, there is nothing in the Act to guide us, and it would appear that the Addendum has at present no legal authority, for its publication has not been notified in the *Gazettes*. There is, we are officially informed, a precedent for notification in regard to addenda. Apparently such publications are not in the nature of the alteration, emendation, and republication contemplated by the Acts, and not until the items in the 1890 Additions are incorporated in a reprint of the Pharmacopœia, and the publication officially notified, will the standards become operative and "by authority." It is highly desirable, of course, that the standards should in the meantime be tacitly recognised by medical men and pharmacists.

Apart from *Gazette* notices it has been the custom to make a slight reference on the title-page of the Pharmacopœia to the reprinting. This is not very adequate, but it is more than has been given in the reprint of the "Additions." This reprint contains a few alterations and corrections, but no reference is made to them on the title-page or in the "Notice," and we should not have known of the first issue being exhausted had we not discovered it as large buyers of the book. The corrections which we have found in the reprint are the following:—

Under "Acetanilidum," page 11, 6th line from bottom, after "which" add "when cool."

Under "Adeps lanae," page 12, line 15 from bottom, change the temperatures to "100° F. (37·8° C.) to 112° F. (44·4 C.)."

Page 20, for "Liquor trinitrini" read "Liquor trinitrini."

These corrections meet, in the case at least of acetanilide and liquor trinitrini, criticisms which we have advanced, but it is noticeable that the most serious errors—such as the formula for *mistura olei ricini*—pass unaltered. It is unnecessary to repeat what we have already said about these, but the fact that some corrections have been made in the "Additions" so early after its publication is the best evidence that criticism was warranted, and that the Pharmacopœia Committees were not immaculate. We may fairly complain now of the want of public notification regarding the few alterations which have been made. The peculiar position of the Medical Council in regard to official notification may account for this; but that is all the more reason why some notice should have been communicated to the journals of medicine and pharmacy, and it would be well, in future, if it would not leave to any chance circumstance the discovery of such alterations as have been referred to in this note.

#### THE INFLAMMABLE LIQUIDS BILL.

THIS Bill is introduced into the House of Commons by the Home Secretary, and is a recasting and consolidation of the several Petroleum Acts now in force, with some amendments. It is proposed that the term "inflammable liquid" shall include not only such petroleum as is defined in the existing Acts, but also any liquid mixture of such liquid



with any other substance, together with bisulphide of carbon. Heavy mineral oils of sp. gr. exceeding 1·000 at 60°, or such oils of sp. gr. not less than 840, and flashing at 150°, are to be exempt from the provisions of the Bill. Inflammable liquids are to include mineral spirit, a liquid with true flashing-point below 73°, and mineral oil, the flashing-point of which is not below that temperature. The Bill provides that 60 gallons of inflammable liquid for sale or private use may be kept on any premises without registration or licence. If any mineral spirit is also kept, the bulk of inflammable liquid kept without licence must not exceed 10 gallons. Not more than 3 gallons of "mineral spirit" may be kept on unlicensed premises, and this must be kept in securely-stopped glass, earthenware, or metal vessels, each of which must contain not more than 1 pint; "mineral oil" must be kept (for sale) in substantial, closed metal vessels, or (for private use) in such vessels or in substantial barrels. Penalties are imposed for any breach of these regulations. The Bill then lays down specific regulations to be observed by persons licensed by local authorities to keep inflammable liquids. The definition of these conditions, heretofore left to the local authorities, appears to be the principal purpose of the Bill. Persons who can comply with these regulations can claim to have their premises registered for storage at a first cost of not more than 2s. 6d. per year, and subsequently of not more than 1s. a year. But it appears that the conditions for storage and dealing laid down in the Bill are to be subject to modification by local authorities at their discretion in special cases. Provisions are added for the distinct marking of cases containing any of these inflammable liquids, and it is required that when any "mineral spirit" (benzine, for example) is sold or exposed for sale, or carried by land or water, it must bear conspicuously on a label the words, "mineral spirit—highly inflammable," and the name and address of the vendor must be added. General rules for the packing and conveyance of inflammable liquids by land or sea follow, and special regulations affecting the hawking of such liquids are added. There are numerous sections defining the powers of supervision granted to local authorities, and those to be exercised by a Government Department. Provisions as to testing, legal proceedings, penalties, explanations of terms, &c., make up this voluminous Bill, which occupies in print fifty pages, and is divided into seventy sections with three schedules. To the schedule describing the method of testing is added a valuable table for the correction of the observed flashing-point to the normal at various barometric pressures. The "true" flashing-point required is that estimated at a barometric pressure of 30 inches. This table shows (to take an example) that if the observed flashing-point with a barometric pressure of 27 inches be 70·2°, that figure will correspond with 75° at 30 inches, and with 76·6° at 31 inches.

The Home Secretary, in reply to a question put in the House of Commons, has stated that the Bill was one which the House would probably think proper to refer to a Select Committee, and we understand that there is likely to be considerable opposition to the increase from dealers, on the ground that the new provisions will tend to cause an advance in the price of mineral oil.

#### PROFIT-SHARING.

THE Board of Trade have recently issued a report on Profit-sharing drawn up by Mr. D. Lowry Whittle, of the Patent Office, in which the modern tendency towards a friendly

co-operation between employers and their staffs is sketched concisely and without prejudice, though not in such a way as might have been expected from a Government Department. Mr. Whittle has evidently gathered his facts almost entirely from published reports. He is entitled to the credit of arraying them in excellent order, so that the salient features of the leading "profit-sharing" schemes are made readily intelligible; but he has done little or nothing towards gathering opinions or records of results from men in this country whose experience would be valuable and interesting. Much more is told us of the elaborate schemes adopted by certain French firms than of the methods by which in this country it has been sought to link together the interests of capital and labour. This is evidently due to the circumstance that there is much more literature on the subject available in French than in English. Mr. Whittle, says he has discussed the subject with fourteen gentlemen whom he names. Of these six are English and eight are French. According to the report profit-sharing under various regulations was brought into operation in France about 1848—obviously a French statement, and only true in a limited sense. It may be said that it is yet too early to collect opinions as to the results of profit-sharing enterprises. However, this may be, it is clear it is a system that is making its way in all industrial countries, and is perhaps destined to neutralise, if not to overcome, the dangerous conflicts between capital and labour which are recognised as one of the principal risks to which modern society is subject.

There are various ways in which profits may be shared between the capitalist chiefs and their employes. Some firms give simply a cash bonus, deducting a certain percentage from their profits and distributing to their employes in proportion to their salaries or by some other method. Others again set aside a certain proportion as a provident or insurance fund; and in other cases by taking advantage of the joint-stock company laws, the staff is enabled and often assisted to acquire a stake, and consequently a direct interest, in the prosperity of the concern in which they work. The advocates of these schemes maintain that they are justified by results, the plans ensuring united co-operation in the reduction of waste and the improvement of the quality of the work done, a diminished cost of superintendence and a greater solidarity and stability of the staff. On the other hand, it is argued that a bonus given regularly soon comes to be looked upon as a part of the wages, and that when this is reduced in consequence of a bad year, or series of years, dissatisfaction is engendered. Instances are quoted in the report in support of both arguments.

It is certain that the better class of employes will wish, as soon as any ambition is roused in them, to have some direct benefit accruing to them out of the improved profits which they have had a share in creating, and it is not certain that in time to come they will not insist on some such distribution. At present trade-unions look with suspicion on profit-sharing schemes, and not long ago, it will be remembered, the proposal of such a scheme actually brought about a big strike. But it can hardly be doubted that by some such methods the rival claims of capital and labour will be adjusted in the future. A scientific apportionment of these is at present difficult to get at, and it must vary immensely, according to the occupation. We are publishing this week the announcement of a scheme just put into operation at the works of Messrs. Idris & Co., in which the division of profits is to be taken on the basis of equality between capital-value and labour-value, after interest on the former and all just salaries have been paid. A few weeks ago we announced a provident scheme promised by Messrs. W. J. Bush & Co.



## LIBRARY

In Mr. Whittle's report a certain imperfect list of English firms who have adopted some sort of profit-sharing is given. Only two firms in the drug-trade—Messrs. Burroughs, Wellcome & Co., with 200 employes, and Mr. De St. Dalmas, with 18 employes—are named in this list. But it is evident that the principle is taking root. We may add that the report referred to is supplied by Messrs. Eyre & Spottiswoode, and is sold at 4½d.

## EXTRACTS.

THE history of the preparation of extracts is almost the history of pharmacy. It reaches back to the days of the classic herbalist-physicians, and still remains the central point of the art. If extracts are ever to be superseded in medicine it is to their own offspring, the alkaloids, that they will owe their annihilation. The skill and science, the patient investigation and the ingenious devices, which have been brought to bear on the extraction from plants of their medicinal virtues, and the wealth at this day invested in the industry, render the subject worthy of such a record as that which M. Adrian, the eminent French manufacturer of pharmaceutical products, has devoted to it in a most valuable work which he published a year or two ago under the title of "Etude Historique sur les Extraits Pharmaceutiques." To the manufacturer of extracts on a large scale the work is invaluable for its illustrations and descriptions of modern apparatus; it has, besides, a particular historical interest, which is the point which just now concerns us.

The earliest authority on extracts known in history or tradition was Chin-Nong, an Emperor of China who died forty-six centuries ago, leaving behind a famous "Herbary," still known among Chinese students, and in which the methods of pressing and boiling or otherwise extracting the virtues of plants are detailed. M. Adrian is excusably vague about Chin-Nong's science, though it is perfectly probable that we may some day discover that our pig-tailed predecessor knew all the wrinkles of the business which we have arrived at through so much study and experiment.

Dioscorides, who wrote treatises on medicinal herbs at the time when St. Paul was writing his epistles, gives direction for extracting the remedial virtues from hemlock, henbane, mandragora, poppies, and other plants. Here is his process for an extract of gentian, though he does not so describe it:—"Crash the root and macerate it in water for five days; then gently boil it in some water until the root and the water are almost indistinguishable; press, and strain the liquid, and again boil it until it is of the consistence of honey. Keep it in an earthen jar."

M. Adrian has not discovered that the much-vaunted Arab doctors in any way advanced the manufacture of extracts. The substances which they thus described were simply the thickened juice of fruits. Several continental writers of the sixteenth century, however, make reference to such preparations, and in the famous Nuremberg Pharmacopœia, published in 1592, forty-three simple and five compound extracts are mentioned, the directions for manufacture appearing simply as "*fiatque extractum lege artis*," or "*et fiat secundum artem extractum*," showing that these products were quite familiar to the pharmacists of that period.

It is worth noting that among the medical writers of the time the terms extract and tincture were employed indiscriminately. Originally the "tincture" was the substance dissolved in the menstruum, and which tinted the latter, and it was only gradually that the words came to be used in their present senses. In the London Pharmacopœia of 1639 a general process for preparing extracts is given in which the directions are to digest the substance with water

for two or three days until its tincture is extracted (*donec omnis materie infuse tinctura extrahatur*). This liquid is afterwards to be evaporated to the consistence of honey.

Extracts seem to have acquired their modern popularity first in Germany, England and France following. The French apothecaries of the seventeenth century discussed them with the exaggerated assumption of science which seems to have been their characteristic. Moses Charas and Nicolas Lemery discovered and somewhat verbosely announced the pretty obvious circumstance that the process of extraction was calculated to dissipate the aromatic and volatile essences of plants characterised by these; and there was some reaction against the idea that the virtues of herbs could be presented in a concentrated form. Meanwhile some chemists were professing to obtain the fixed salts of plants by burning them and collecting and lixiviating their ashes. This scheme had a certain success, but it was superseded in the early part of the eighteenth century by the invention of the Count de la Garaye, a very benevolent gentleman, who devoted his whole life and fortune to the relief of the poor, and in pursuance of his main purpose, dabbling largely in medicine. The count did not quite believe in the fixed salts of his contemporaries, and he devised an ingenious arrangement of wheels, pulleys, and stirrers, by which he claimed, in a work on "Hydraulic Chemistry," to be able far more perfectly to extract the essential salts of vegetables, animals, and minerals. The substance to be extracted was first powdered and sifted, and then, triturated in earthen vessels by the pestles of the machinery constructed for the purpose for a whole day, always under distilled water. The impregnated water was afterwards drawn off and reduced to a proper consistency by means of gentle evaporation.

The two eminent chemists Fourcroy and Vanquelin gave great attention to the subject of extracts about the time of the French Revolution. Imbued with the new views which Lavoisier had made current, they showed that it was a mistake to suppose that the extract of a substance could be regarded as a definite simple body. They were complex mixtures, said Vanquelin, the nature of their constituents varying with the soils in which the plants yielding them have grown. But he maintained that all contained an "extractive." This, he insisted, was the same in all plants, and yet contained, or rather was, the essential virtue of the plant. The "extractive" was a compound of carbon, hydrogen, nitrogen, and oxygen, had special chemical properties, and was, in fact, analogous to what dyers called the colouring principle in vegetables. To trace the development of this idea to the isolation of alkaloids, which are its direct descendants, would lead us beyond the limits of an article and into the realm of organic chemistry, the threshold of which we have approached.

What remains of the history of pharmaceutical extracts is largely the history of apparatus. Trommsdorff, in Germany, first applied steam-heat to the manufacture in 1812, but a greater advance was made a few years later (about 1820), when Barry, of London, a partner in the firm of Allen & Hanburys, first described an apparatus he had constructed for evaporating *in vacuo*. Mr. Barry made several improvements in his original apparatus, and M. Adrian frankly awards him the credit of the first practical introduction of the great improvement effected by his system of evaporating extracts at a very low temperature. The advantage of the process was at first disputed by eminent authorities on the apparently reasonable ground that the low-temperature evaporation would not destroy the germs which brought about decomposition; but M. Adrian remarks that time has



proved that the objections were unsound. Mr. Barry's invention was perfected by Dr. Redwood, to whom, also, M. Adrian gives due credit. Dr. Redwood adapted to pharmaceutical purposes the principle of the sugar-refining machinery, and thus provided a method of working which has enabled the principle of evaporation *in vacuo* to be applied on an industrial scale.

Our sketch must stop here; but it is necessary to add that the value of M. Adrian's excellent work is by no means of historic interest only. We have limited our notice to his first chapter for the present, but it should be stated that the rest and the major portion of his treatise, which describes and admirably illustrates all the modern methods and machinery of his own and other laboratories for the production of all kinds of extracts, is of the utmost utility to all actual workers in the same department of industry.

### COMMENTARY.

**THE ANTI-PATENT MEDICINITES.**—Dr. Hubbard has written a reply to Mr. Morgan Richards in the *National Review*, but he does not add anything of importance to his previous indictment of poisonous patent medicines. His mistake seems to be that he thinks he has made a discovery. The public do not expect miracles from patent medicines, and most people are capable of reasoning that if they take five doses of any medicine instead of one the effects may be bad. But patent medicines sell because they fairly answer the purposes for which they are intended. Generally they are no better and no worse than the compound which a doctor of medicine would prescribe; but they are much cheaper, and the only diplomaed must put up with the competition.

**RESTRAINT OF TRADE.**—It appears to be established, by the decision of the Court of Appeal in the Bolton Mineral-Waters Association case, that a contract binding individuals to maintain a certain price for their goods is not enforceable at law, unless the area in which, and the time during which, such a contract is operative are very limited. Certain aerated-water makers bound themselves by what looked like a legal contract not to sell any aerated waters at less than 9d. per dozen. They agreed that any one of them selling below that sum should pay a forfeit to the associated body of 10%, and they made that agreement for ten years. The Court of Appeal unanimously supports the Divisional Court in the view that such a contract is an illegal one. Ten years, they say, is a preposterous period, and the contract does not state its action is limited to any particular district. We judge, but cannot be sure, that if the contract had been specifically limited—say, to the Bolton parliamentary borough—and had been made for not more than a year at a time, the court would have been disposed to give it effect. But we may assume that analogous contracts—those, for instance, agreeing to sell patent medicines at a specified price, in which no period of time or area is fixed—are similarly unenforceable. No judge has ever said that a contract to hold a piece of land and to pay rent for it for ten or for ninety years is preposterous; though it would, perhaps, be difficult to discover wherein lies the difference of principle.

**PHARMACY LEGISLATION IN VICTORIA.**—We learn from *The Chemist and Druggist of Australasia* that the Victorian Pharmacy Act of 1876 has been incorporated into the Victorian Medical Act of 1890. This is described as "An Act to consolidate the law relating to medical practitioners, dentists, and chemists, and to adopt and continue the British Phar-

macopœia." It contains in all 99 sections and 13 schedules. It is in four parts. Part 1, with 37 sections, relates to medical practitioners; part 2, with 30 sections, to dentists; part 3, with 27 sections, to chemists; and part 4, with 1 section, to the adoption of the British Pharmacopœia. The Act has taken this form from the hand of the Chief Justice of Victoria, who has been long engaged in "consolidating" the whole of the statutes of the colony, and who, on completion of his herculean task, has received the formal thanks of both Houses of Parliament; an honour almost, if not quite, unprecedented in colonial history. In consolidating Acts of Parliament dealing with one subject the principle is that the law should not be changed in the least; where an Act has been amended or partly repealed, or both, by a subsequent Act or Acts, the two measures are fused into one, so that the citizen may discover his whole duty without reference to a second document. This does not forbid verbal changes which do not alter the sense, and the measure of the success of the consolidator is found in the skill with which incongruous parts are fused into a whole without modifying their separate effects. The Consolidated Statutes of Victoria form a series of volumes of over 3,000 pages in all! In the compilation and printing of this enormous bulk errors of copying or of oversight are sure to occur, and our contemporary has pointed out a few small discrepancies in the Acts affecting pharmacy.

**PHARMACOPŒIAL CHEMISTRY.**—The United States Pharmacopœia Committee are thinking of changing their table of atomic weights again. We are indebted to Dr. Charles Rice, the chairman of the committee, for a copy of a new table which has been prepared for them by Mr. F. W. Clarke, the chief chemist of the United States Geological Survey, and a well-known authority on the subject. The table comprises all the known elements, those of pharmacopœial, medicinal, or chemical importance being printed in bolder type. We are told that the "table represents the latest and most trustworthy results, reduced to a uniform basis of comparison, with oxygen = 16 as starting-point of the system. No decimal places representing large uncertainties are used. When values vary, with equal probability on both sides, so far as our present knowledge goes, as in the case of cadmium (111.8 and 112.2), the mean value is given in the table." In this way bromine appears as 79.95, hydrogen 1.007, iodine 126.85, silver 107.92, and so on. It seems a pity that the American Pharmacopœia Committee should be so inconstant. We do admire their desire for accuracy, but it is possible to carry it a little too far. In this instance all that is wanted of the atomic weights in medicine is approximate figures, such as 127 for iodine, and 1 for hydrogen. As long as science only does a little shifting in second and third decimal places, it is just as well to leave the Pharmacopœia tables alone. They are not text-books of chemistry.

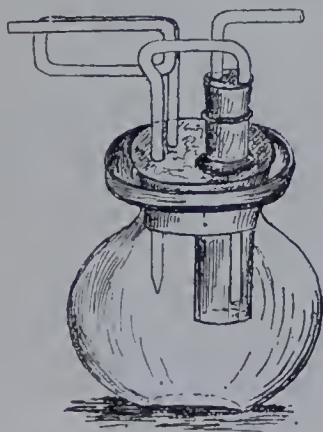
**A MEDICAL HOTEL.**—"Scrutator," in *Truth*, brings to public notice a brilliant idea which he says has been put before him by a man of science who signs himself "M. D." "In a general way," says "Scrutator," "I am not ashamed to confess, I do not think very much of science. What is science after all, but a lot of guesses with Greek names? The guesses of one century are always shown to be wrong in the next, and as for the Greek names they are most of them wrong from the first, as the most casual acquaintance with the lexicon will suffice to demonstrate. Whether monkey is the father of organ-grinder, or organ-grinder the father of monkey; whether microbe produces disease, or disease produces microbe; whether between two abominable nastinesses—the dried and pounded toad which our great-grandfathers patiently



swallowed, and the diseased guinea-pig with which we credulously inoculate ourselves—there is a pin to choose as regards health, I know not, and, what is more, I do not believe anybody else knows. All I know is that the years of man upon earth have ever been, are, and apparently always will be (bar accidents), three-score-and-ten, and that the last thirty-five are hardly worth living. In all the centuries that have come and gone (until yesterday, when I received 'M. D.'s' letter), only one discovery really beneficial to life has been made—the nursery feeding-bottle. We owe it not to a man of science, but to a gentleman in the rubber and gutta-percha line, who was not made a baronet, and to whom no public statue has as yet been erected. Thanks to this immortal invention, thousands of children whose mothers can neither nurse them nor afford to hire wet-nurses now live, whereas in former days they would have perished. Thus, and thus only, the apparent—i.e., average—duration of human life has been increased, and the men of science take the credit of it." The idea suggested is that of a medical hotel, so arranged that patients shall be provided only with such diet as may be suitable to their complaints, and shall not be liable to temptation by seeing their neighbours and friends indulging in luxuries which they may not touch.

#### APPARATUS FOR CARBONIC-ACID GAS ESTIMATION By W. H. MCGARTH.

HAVING had occasion lately to undertake a number of  $\text{CO}_2$  determinations, and finding that the means of conducting them were hampered for want of a balance the pan of which would admit of lofty outside attachments, I constructed the little apparatus of which I append a sketch; all that is required being a small flower-vase, 3 oz. capacity, a 2-drachm phial, about sixteen inches quill tubing, and a couple of corks, perforated as shown in the sketch.



It has three recommendations—

1. Its cheapness, as it can be made for 6d.
  2. Anyone possessing a little experience in fitting up such appliances could make one in an hour.
  3. It will give as reliable results as one costing 5s. or 6s.
- I have not thought it necessary to give working details, as I considered the sketch would be better instruction, and trust it may be found useful to those similarly circumstanced.

#### "ARCANA FAIRFAXIANA; OR, YE APOTHECARYE HIS BOOKE." \*

UNDER this title Mr. George Weddell, of Newcastle-on-Tyne, has lately published in facsimile an old MS. recipe-book found by him seven years ago in a box of lumber—a "find" which should induce members of other historic drug-houses to rummage out the neglected corners of their premises; for Mr. Weddell's book proves to be one of very great interest to antiquaries, and especially to such as are connected in any way with the medical or pharmaceutical professions. Mr. Weddell introduces the book to his subscribers in a series of learned and elaborate prefaces, dealing in turn with the "Story of the Book," "The Fairfax Family" and their genealogy, the "Names" of persons mentioned in the book, the "Handwritings," the "Subject Matter," and the "Mode of Reproduction." From these it appears that the first owner of the book was Margaret, wife of Sir Henry Cholmeley, during whose ownership of it about half the entries were made, at various dates down to 1626, in which year Lady Cholmeley's daughter Mary was married to the Hon. and Rev. Henry Fairfax, son of the first Lord Fairfax, of Denton, and is believed to have carried the book with her to her new home. A very considerable number of further entries were made by this Henry Fairfax and his wife. They seem to have had access to other similar books in the possession of other members of the Fairfax family and their connections, a great many of the recipes having the names of those from whom they were received appended to them, and some being, moreover, in the actual handwriting of the donors. Hence the name "Arcana Fairfaxiana" given to his facsimile by Mr. Weddell. After Henry Fairfax's death the book became the property of his elder son, Henry, fourth Lord Fairfax, whose daughter, Ann (says Mr. Weddell), probably took it away with her when she married Robert Carr, Esq., of Cocken, in the county of Durham. Her son Ralph, as appears from entries in the book itself, gave it to a neighbour, one Robert Green, of Cocken, who added largely to it both from his own resources and by borrowing from friends of a like mind with himself. The dates of these latter entries are somewhat uncertain, but as one was contributed by Mr. Hedworth, M.P. for Durham in 1728, and another is stated to have been copied from a work "just published," which is known to have first appeared in 1763, Mr. Weddell concludes that the book continued to receive additions down to about 1770. It will, therefore, be seen that the work represents the medical and culinary art of nearly two hundred years. The medical entries of what Mr. Weddell calls the Cholmeley period are evidently to a great extent copied from an apothecary's book, or from other professional sources; the Fairfax recipes represent domestic rather than professional medicine, and include, besides, an unusual number of mere cookery-book recipes, whose only connection with medicine is the indigestion they would probably cause, for, like Sam Weller's pie that was all fat, they are "rather too rich." The medical portion of the "Green" collection shows a great advance upon the earlier periods, both in the ends proposed and the methods employed. Enough, however, has been said to show the interesting character of the book as a whole, and its value as a guide to the evolution of medical science during the period over which its compilation extends.

A word or two must be said as to the handwritings and the methods of reproduction. The handwritings are not only by various persons, but they differ greatly in style according to the different periods. The greater portion of the entries in the Cholmeley period are in a beautifully fine Italian hand, which is even yet much more easily read than a great many contemporary hands. Some, however, of the earlier entries are in the difficult "Shakespearean" hand, so called because Shakespeare's familiar signature is in this

\* *Arcana Fairfaxiana Manuscript: A Manuscript Volume of Apothecaries' Lore and Housewifery nearly three centuries old, used, and partly written, by the Fairfax family. Reproduced in facsimile of the handwritings. An introduction by George Weddell. Newcastle-on-Tyne: Mawson, Swan & Morgan. MDCCCXC.*

MESSRS. SOLPORT BROTHERS have removed from 68 to 6 Shaftesbury Street, New North Road.

THE LIQUOR CARNIS COMPANY (LIMITED) announce that interest at the rate of 7 per cent. on debentures in this company has been declared.



style; some are in the more laboured, but scarcely more legible, "Secretary's" hand, and other some in the "Glossy" hand, terms which Mr Weddell explains in his introduction. The reproduction of these various handwritings has, of course, been a matter of considerable difficulty. The greater part—in fact, all but portions of one or two pages—has been traced by hand; the rest was done by photography, and the result is an exact facsimile, even to the very blots, where these did not interfere too much with legibility. About forty pages of the Cholmeley portion of the book consist of miscellaneous recipes, mostly herbal, and apparently such as were current in purely domestic medicine. Amongst these our old friend oil of swallows holds a place, and we copy the formula for the benefit of any morbidly conscientious reader who may desire to keep only the genuine article:—

"Take twenty swallows, and put them in a mortar and putt therein lavender cotton, lavender, specke (spike), camomill, knotgrass, ribwort, balme, vallerian, rosmarey tops, woodbine tops, struges (stalks) of vines, french mallows, the tops of ailehouf, strawberry strings, tutseu leaves, planten, walnut leaues, tops of young bayes, isop, violet leaues, sage of vertue, fine romaine wormewood, of each of these a handful; ij of camomill; ij of red roses, ij ounces of cloues, beaten smale, a quart of ucatsfoot oile, or els as much May butter. All these must be beaten together in a mortar, and then putt them in an earthen pott and lett it stand under y<sup>e</sup> ground ix daies, and stopp the pott cleane, and veary close, then take it vp, and putt in the pott and (*sic*) halfe a pounce of wax, and a piute of neatsfoot oile or els May butter, and then put the same pott into a pott of water, and lett it seeth in the same water viij howres; and so take it out of the water, and straine it and keepe it y<sup>e</sup> whole yere Probatum."

This is a very fair sample of the contents of this part of the book. Near to it is a formula for "Oile of Exiter," concerning which inquiries were recently made in our correspondence columns. The chief ingredients are pagles (*i.e.* cowslips), calamint, herb John, sage juice, "ambergreece," agrimony, southernwood, pennyroyal, lavender, pellitory of Spain, rosemary, camomile, sorrel, and lilies, steeped in olive oil and then boiled in white wine. Afterwards the residue must be put into a linen bag and "strayned" between two staves, the resulting oil to be kept in a vessel of glass or tin, for no other will hold it. This potent medicament is "veary good for y<sup>e</sup> goutte, or where one is brused, or for the palsie." However this may be, such remedies as these are scientific when compared with some others near them, as, for example, with these:—

"For y<sup>e</sup> bleeding at y<sup>e</sup> nose.

"Probatum: Take a toade and drie it in marche; put y<sup>e</sup> same into some silke or sattene bagg and hange it about y<sup>e</sup> neck of y<sup>e</sup> party next the skinne, and by God's grace it will stanch presently."

Later in the book there is this curious Latin charm for the same purpose:—

"Sanguis manet in te,  
Sicut Christus ferat in se,  
Sanguis manet in tua vena,  
Sicut Christus in sua pena;  
Sanguis manet in te fixus,  
Sicut Christus in Crassifixus.

Say this over three times, naming the parties name, and then say the Lord's Prayer."

"To know whether a sick man shall live or die certainly proved manie tymes.

"Take a pennyweight of land cressede (cress seed) and giue y<sup>e</sup> sick to eate three daies togeather, fasting, and to drinke a drafte of water after it or wine if he cast it vp he shall die."

"For the Epileptia Vnfallible it remedieth in six daies.

"Take the after burden of a Woman and drie it in a pott till you make powder of it, and giue of it to the diseased for vj daies, fasting, in the morning, ̄ss at a tyme in ale or bere, not to drinke after it for two houres. You must vse the burden of the male childe to the woman, and the feminine to the man. This is proved both of man, Woman and childe Vnfallible."

It is of a piece with such recipes as these that when cow's milk is ordered for a consumptive patient it must be the milk of a red cow (a superstition still current in some parts of England), and that cock's broth for a rickety child must be made of a red cock, and one smothered in his own blood. This, however, comes later in the book; and before dealing with that period we must glance at the "professional" part of the Cholmeley entries. The items that can be most certainly classed under this head are to a great extent mere lists of simple or compound remedies arranged according to their uses—lists, that is, similar to those in another old book recently described in these columns under the title of "Pharmacy under the Tudors." Many of these remedies have a place in the older Official Dispensatories. Of the "4 whott (hot) vngents," for example—viz., ung. martiatum altheam, ung. aragoni, ung. Agrippæ, ung. dialthiæ—the first and the last are given in Alleyne (1733), and perhaps in later books of equal authority; of the seven remedies for inflammation of the bladder—"Emp. de grans Laurelli, Mithridatem galeni, Electuarium Clusis, Syrup. de iuivbus, oleum Cheiri (wallflower), Troch. de Alchachengi, and oile of sweete almonds"—several are still in use. Whilst animal materia medica is, as we have seen, largely represented in the domestic recipes of this period, these professional remedies, though not entirely free from such abominations as "oleum de scorionis" and "oleum vulpinum," are for the most part vegetable, gold and "gemmes" being the *minerals* most employed. The names are generally in Latin, but English terms occur frequently. Occasionally, also, French is resorted to, and all three languages are sometimes mixed up in the name of one preparation. These facts seem indicative of a much earlier origin for the names, and consequently for the medicaments, than can be assigned to any portion of the manuscript. Some of the simples, too, are mentioned under their old French names, as "Langdebefe," for bugloss. The majority of names of compounds are entirely obsolete, those of the simples less frequently, but still occasionally so. Some of the medicines we cannot, indeed, identify, and this is the case also with some of the herbs whose names are scattered up and down the book. What is Crow-tree bark; and Periolle; and Pennedice; and Pigell; and Bagell; and Antorosi? What is "canouse that leather never came in"? Some of these may be familiar friends disguised in quaint spelling, as Sugar of Lead appears in the form of *Sacrum Saturn*, cubebs as quibibis, cochineal as scuttcheneale, and so on. Many of the names met with are still in use locally, and the hunting-up of these is not the least interesting use to which the book can be put. The later recipes of the "Fairfax" period are more various than the earlier ones, many being due to the housewifely care of Mrs. Fairfax, whose notions of cookery were extremely generous. Pancakes made with cream, and shoulders of mutton stuffed with half-a-peck of oysters, would no doubt be pretty eating; but where such recipes abound we must not be surprised if others are needed, such as the following, "for y<sup>e</sup> Jarnedice":—

"Take ale 3 pints, saffron 2*d.* worth, wormes a good handfull well washed and beaten in a mortar, strain them into y<sup>e</sup> Ale, and with 2*d.* worth of seney, and a little sugar drinck it."

Worms, it would seem from another recipe, have a very useful property the knowledge of which has been unaccountably lost in our day:—

"To pull out a toothe.

"Take wormes when they be a gendering together, dry them upon a hott tyle stone, then make powder of them, and what tooth you touche with it will fall out."

Another supposed fact in the natural history of worms meets us here:—

"To make a worme come out of y<sup>e</sup> Head.

"Take y<sup>e</sup> Marrow of a Bull or Cowe & putt it warme into y<sup>e</sup> eare, and y<sup>e</sup> worme will come forth for the sweetness of y<sup>e</sup> Marrowe."

And yet another here:—

"How to Know y<sup>e</sup> K.(ing's) Evil.

"A ground worme alieue and lay him upon y<sup>e</sup> swelling or sore, and couer him with a leafe. If it be y<sup>e</sup> disease y<sup>e</sup> worme will change and turn into earth, yf it be not he will remaine whole and sound."



Upon the whole one is rather glad not to have been a parishioner of the Rev. Henry Fairfax's, but his recipes are not all of this sort. They show, indeed, an advance upon the purely domestic practice of the preceding period; more attention is given to diet, and the medicines, though made up into strange messes, appear to be directed by a certain principle. Like all amateurs, his reverence was too much given to volley-firing; but evidently he had studied medicine, at least herbal medicine, and occasionally we meet with evidences of intelligent observation. The description of the herb *rossolis* (sun-dew) is particularly interesting, but is too long to quote. Even this, however, is not free from the superstition of the times; we are particularly enjoined, in plucking the herb, not to touch it with the hand, or its virtue will be destroyed.

Many of the recipes not medical in character are of interest to pharmacists. Such are the formulae for perfumes, inks, dyes, cosmetics, and miscellaneous preparations, of which one sample will suffice, though this, perhaps, like Dame Margery's "Rosemarie," would professedly be taken as a medicine:—

"To make Vskabaughe.

"Take a gallon of white aqua-composita (a liquor distilled from a strong spiced ale, sundry herbs, worms, and 'goose tords newly made') and putt it in a Vessell. Then take a pound of Musk-comfetts; an ounce of Cynamon, 3 stickes of Lycoris & an ounce of fine sugar. Bruise all theise and putt them to y<sup>e</sup> Aqua-Vitæ & let them remain there 12 Daies, and stirre them well every day, & then poure forth y<sup>e</sup> syrop from the rest as clean as you may, & this is y<sup>e</sup> perfect Vskabaugh."

One would hardly recognise "the crater" there, nevertheless.

There is one recipe "to perfume a silver bottle" which almost takes one's breath away by its disregard of cost—a single line will suffice here: "Put in your musk half an ounce (*sic*) and let it boyl awhile." In others pearls and "gemmes" are introduced with a lavish hand, and gold itself is a not infrequent ingredient. Our comments, however, are becoming too discursive. Open the volume where we will, something quaint or startling or suggestive, or it may be something of real value, meets the eye. Now it is an anticipation of Mr. Allcock's porous plaster (p. 9), now the famous "weapon-salve" of Paracelsus (p. 61), now a "touch of nature" like the letter (p. 60) from some unidentified "Margret" to her "Right Noble Knight," or "a note of Miss Barbara her lessons on y<sup>e</sup> Virginale" (p. 205)—and these "asides," as Mr. Weddell well calls them, are truly delightful—now a half-dozen of recipes for "plage water" recalling graphic pictures of the terrible year 1665, now the Most Noble the Marquis of Granby's mode of brewing small beer; and amongst so many enticing items the sympathetic reviewer is at a loss where to settle. Volumes might be filled with a mere description of the herbs and simples mentioned in the book, whose quaint names and quainter associations have a haunting charm for every lover of old lore. "Take the vrine of yong children knavish and wanton"; or, "Take comfuri, knotgrass, bursa pastoris and plantine, of each a handfull"; or, "Take damask roses half blowne out and straine ont y<sup>e</sup> inice as much as you can. . . . Then take rubies and beate them very fine, and likewise amber and pearle, a little ambergreece, and mingle all these together"—truly these were the golden days of pharmacy! If one's lot had but been cast among them, and one's life could have been spent thus a-culling of simples! Failing that, the best thing one can do is to buy and study Mr. Weddell's book, which is at once an ornament to one's shelves, a pleasure to one's hands, a delight to one's heart.

**STRIKE OF GLASS-BLOWERS.**—French pharmacy seems likely to suffer from a scarcity of bottles, an extensive strike having occurred amongst the glass-blowers of the principal Lyons factories. The cause of this is that the manufacturers have agreed on a wage-tariff which the men consider insufficient. At a meeting held recently the workers decided upon allowing their employers a fortnight for consideration before adopting a general strike. It is estimated that this would throw about 1,500 men out of employment. The Lyons glass-blowers say they are supported in their demands by their fellows all over France, and have adopted a very firm stand. On the other hand, the employers show no signs of concession.

## MATERIA MEDICA NOVA:

BEING CHEMICAL, PHARMACEUTICAL, AND THERAPEUTICAL NOTES ON REMEDIES RECENTLY INTRODUCED INTO MEDICINE.

**Aletris Rhizoma.** Ague, Colic, or Unicorn Root.  
Starwort. Blazing Star. Stargrass.

THIS is the rhizome of a hæmodoraceous plant, *Aletris farinosa*, L., which grows in the United States. It has for long enjoyed a considerable reputation of a popular character as a remedy for uterine disorders, and of late years physicians in the United States have taken it up; while its reputation has been further extended through the advertisements of a pharmaceutical speciality, aletris cordial. Its action is general—that is to say, it has a tonic influence upon the uterus, and is usually prescribed in suppressed menstruation, amenorrhœa, dysmenorrhœa, bucorrhœa, and the like. It is also credited with emetic, purgative, and vermifuge properties, and relieves flatulency and indigestion.

The rhizome is generally from one to one and a half inch long, consisting of about six joints, has a greyish-brown exterior, and breaks with a white, mealy fracture. It is inodorous and has a bitter taste. The drug in powder form may be given in 10-grain doses, but the fluid extract is preferred. This is made with a menstruum consisting of rectified spirit 3 parts and water 1 part, the strength of the drug to finished product being 1 in 1. Ten per cent. of glycerine may be added to the menstruum.

**Alstoniæ Cortex.** Alstonia Bark.

Two different barks of this name have for long been known to materia medica, and from time to time their somewhat unsteady reputation gets a "fillip." The barks are yielded by species of *Alstonia* (the Eehites of Linnaeus), trees belonging to the natural order Apocynaceæ; and since the introduction of strophanthus, which belongs to the same order, therapeutists have taken the Alstonia barks upon a somewhat different basis, and are inclined to regard all drugs from the order as possessing peculiar properties. The better-known of these barks is that of *Alstonia Scholaris*, or dita bark, a tree indigenous to the East Indies, the Philippine Islands, and other parts in that region. This has been long used in India as a febrifuge, this property depending upon the presence of alkaloids—ditaïne or echitamine ( $C_{22}H_{28}N_2O_4$ ), ditamine ( $C_{16}H_{19}NO_2$ ), and echitenine ( $C_{20}H_{27}NO_2$ )—as well as a neutral principle, eehicerin. The bark has a high reputation in India as an antiperiodic and tonic in place of cinchona; but it possesses, besides, the virtues of relieving diarrhœa and chronic dysentery, while it is valuable as a tonic for fever convalescents. In Europe it has been used in puerperal and typhoid fevers, and for disorders of the digestion. The drug is best given in the form of tincture, 1 to 10 of proof spirit, the dose of which is 1 to 2 drachms.

The bark of *Alstonia constricta*, better known as Australian fever bark, has properties very similar to the foregoing, which presumably are due to its bitter alkaloid alstonine or chloragenine ( $C_{21}H_{29}N_2O_4$ ). It contains, also, alstonidine and porphyrine ( $C_{21}H_{23}N_3O_3$ ). The dose of this bark is 5 grains. A tincture may be made of the same strength as that of dita bark.

**Anæsthesin.**

At the Exhibition of the International Medical Congress, held at Berlin last year, Meister Lucius & Brüning exhibited a synthetically-prepared compound, which was said to be a local anæsthetic of greater power than cocaine. The substance was a white crystalline powder. Little has been heard of it recently until Gehe & Co. made the announcement the other day that the substance is bromacetanilide. If so, it may be represented by the formula  $C_6H_5NHC_2H_4BrO$ . It would be rash to speculate on the nature of the substance, for it is not yet a commercial product, and it is questionable if the anæsthesin of Meister Lucius is the same as Gehe's.

**Antinervin.**

This is the name applied by Gehe & Co. to a new remedy which is now under investigation. It is said to be bromosalicylanilide, the formula of which may be  $C_6H_5NHC_2H_4BrO$ .



## Trade Report.

*Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.*

*It should also be recollected that for many articles the range of quality is very wide.*

42 CANNON STREET, February 19.

**B**USINESS has been very quiet this week in the drug and chemical markets. The recent advance in spices has to a great extent subsided, though the shellac sales (postponed from Tuesday till Wednesday on account of the fog) went off fairly satisfactorily. To-day's drug sales were not finished until nearly five o'clock, but the tone was by no means a lively one. The principal alterations in the market may be summed up as follows:—Ipecacuanha, cardamoms, quassia wood, cod-liver oil, olive oil (eating), beeswax, Tinnevely senna, and buchu leaves are dearer. Honey, senega root, and Honduras sarsaparilla are firmly held. East Indian aloes, though in large supply, find a ready market; and kola nuts also sell fairly well. Colocynthis, Guayaquil bark, cuttle-fish, musk, gamboge, rhubarb, gum benzoin, and gum myrrh are easier. Japan wax and jalap also show great weakness. The chemical trade has been very quiet, although citric acid is still slowly rising. Tartaric acid is also firm, quicksilver and mercurials steady, cream of tartar lower, and quinine weak. In the outside markets most changes are in buyers' favour. The tea market is firm. Zanzibar cloves and mace are improving in value, but Cochin ginger, benzol, sticklac, nutmegs, shellac, and black Singapore pepper are worth less money than last week.

**CONVENTIONS IN GERMANY.**—The *Handelsmuseum* publishes an interesting abstract of a paper by Dr. F. Grossman on the "Cartelle," or syndicates, now in operation in Germany. From 42 at the end of 1887, the number of these organisations increased to 70 in 1888, and 77 in 1889. The year 1891 commenced with the formidable array of 116 existing syndicates, while 23 new ones were in course of formation. The iron, stone and pottery, and chemical industries are the worst afflicted. The last-named of these began the year hampered by 27 syndicates with 2 in course of formation. The leading Cartelle now extant, or which have been in operation, in this industry are:—The Stassfurt potash convention (established in 1879), the conventions in bromine (renewed for three years in 1888), Glauber salts (established 1882), sulphate of alumina and alum (established 1883), potashes (1886 to 1888, renewed in 1889), prussiate of potash (established 1886 with United Kingdom and Austria; from 1889 with Austria alone), and chromate of potash (Anglo-German established 1887); the German Salt Union and its offshoots (established 1886 and renewed in 1889 for ten years), the caustic soda convention (1883-88), the soda-ash union (established 1887), the rings in sulphate of ammonia (with Britain), borax (established 1886), boracic acid (established 1889), tartaric acid (1884 to 1887), sulphuric acid (established 1887), the Anglo-German convention in oxalic acid and oxalate of potash (1887 to 1890), the Anglo-Austro-German ditto in Uzan-dyes (established 1889); the corners in quinine (1883 to 1884), sulphonal (1888 to 1889), chloroform (established 1889), salicylic acid (established 1889), and iodine (American-European); the unions of German artificial-manure makers (established 1887), phosphate works (established 1888), soapworks (established 1890), and vinegar-works (established 1890); the combinations in mineral oils (established 1885), paraffin candles (established 1887), ultramarine (established 1890), eating-oil (established 1887), gunpowder (established 1881), dynamite (established 1880, renewed 1889), and hunting-amunition (established 1885); and the German petroleum-import trust, dating from the commencement of 1891. It is difficult to see how any legis-

lation could effectually suppress these outgrowths; but perhaps they, too, by teaching the advantages of co-operation to their members on the one hand, and affording to the public object-lessons in the evils of indirect taxation on the other, may actually "labour for some good, by us not understood."

**FRENCH PERFUMERS AND THE LARD DUTY.**—The new French Customs Bill proposes to place upon lard, now admitted duty free, a tax of 15f. per 100 kilos. The tax is intended to strike at the United States as a kind of small retaliation for the McKinley Act, but to all appearances the principal sufferer by its enactment will be the French perfumery industry. Nice, Grasse and other perfumery centres use vast quantities of fresh lard, which they obtain from Bologna, Parma, Piacenza, Milan, and other places in Italy. Alarmed at the prospect of so heavy a duty upon an indispensable ingredient of their industry, the principal Grasse perfumers have held a meeting at the Town Hall and decided to petition the Minister of Commerce against a duty upon lard, or at any rate upon fresh lard. They also decided to revive their moribund *Chambre Syndicale des Matières Premières de Parfumerie*, and to place themselves in contact with the corresponding organisation in Paris, as well as with the French soap and candle makers, for the purpose of united action.

**CARDAMOM-SMUGGLING IN TRAVANCORE.**—The Maharajah of Travancore, who derives a considerable revenue from an export duty on cardamoms, has been exercised of late with devising means to check the smuggling of cardamoms from his State into British territory, which has been going on largely in recent years. The smugglers seem to be most active in the forests of Bodianaykanur, Thevarom, and Parnapuram, in the Madura district. The Dewan has suggested to the British Government the expediency of employing a detachment of the British police for that purpose, the salaries of the men being met by the State of Travancore. But the British authorities have refused to accede to that request, and have advised the Dewan to use his own police.

**THE CROPS IN TINNEVELLY.**—A few weeks ago the announcement was made from the rostrum at the drug sales that the crop of Tinnevely senna had proved a total failure in consequence of unfavourable weather. The statement was received with a scepticism begotten of many previous false alarms, and passed by almost unnoticed. But the official report in the *Madras Times* of January 29, just to hand, bears out the alarming news as regards the crop injury in the Tinnevely district generally, though senna is not, of course, specifically mentioned. Says the report: The prospects of the season in the Tinnevely district are very unfavourable. The rainfall during the past year from April to December was about 15.50 inches against an average of 24 inches for the past twenty years, and of 26.57 inches for the quinquennial period ending 1889-90. The western portion of the district along the hills has fared the worst. Although no actual famine is apprehended, it is feared that there will be distress and great scarcity of crops. The lands in the parts noted above are irrigated by large tanks fed from hill streams. These tanks everywhere are dry and the lands under them waste, while wells which irrigated other lands have also mostly run dry. They have in many places been deepened, but without much result.

**TERMINAL TRADING IN ENGLAND AND GERMANY.**—The fourth ordinary general meeting of the shareholders in the London Produce Clearing-house (Limited), took place on February 16. A report was submitted showing that the engagements during the past year had amounted to 36,500,000*l.*, in fulfilling which the company had not made a single bad debt, nor had they had a single dispute with any of their customers to refer to arbitration. Dividends were declared of 3*s.* 9*d.* a share on the ordinary share capital, and of 6*l.* 5*s.* per share on the founders' shares. Owing to the great financial difficulties of the past year, there had been some curtailment of operations and engagements. Their most important function, said the chairman, was to regulate speculation. Under



their practice adequate deposits and margins were required, and their institution remained perfectly neutral as to the rise or fall of prices, and acted entirely with the one object of guarding the sanctity of contract. He claimed that they did better than Government legislation could do all that was necessary to keep speculation within legitimate bounds. They felt that their system was a necessity under the new condition of trade, and, time being on their side, their future might be considered as beyond all doubt. Meanwhile in Germany, the Fatherland of terminal market trading, a strong current against this mode of commercial operations is setting in. The Germans are not given to petitioning their Parliament with the same frequency as we do, and the fact that 23,117 of them, half of whom are merchants in business and landed proprietors, have petitioned the Reichstag to legislate against terminal dealings is therefore of some significance. The petition prays for the limitation of Bourse transactions in foodstuffs, and for the prevention of the employment of capital for objects inimical to the general welfare, including rings, syndicates, Cartelle trusts, &c.

**ACID (CITRIC).**—The market is again a little firmer this week, and, on the spot, 1s. 8½d. per lb. is the lowest quotation. At this figure one 5½-cwt. cask was sold "without reserve" at to-day's drug sales, for account of the underwriters, but it is doubtful whether much more could be obtained at that price. Two of the principal English manufacturers are asking 1s. 10s. and 2s. per lb. respectively.

**ACID (TARTARIC).**—The market is firm but rather quiet, at 1s. 3¼d. to 1s. 3½d. per lb. for *English* brands, and about ¼d. per lb. less for *foreign* acid.

**ACONITE.**—Thirty-eight bags, 1½ cwt. each, *Japanese* root, rather mixed and lean, sold at 24s. to 25s. per cwt., subject to holders' approval. The limit first named for it was 27s.

**ALOES.**—Only 5 cases *Cape* aloes were offered to-day, and these sold at 22s. per cwt. (a very full price) for good hard bright quality. *Curaçao* also were poorly represented as regards quantity. Of about 200 packages one-half sold at 35s. per cwt. for good brown liver, 20s. 6d. to 22s. 6d. per cwt. for fine bright capey aloes in bold gourds, and from 17s. for fair brown, and 12s. 6d. to 13s. for fair capey down to 7s. 6d. per cwt. for common qualities. *East Indian* aloes in skins were in very large supply, and sold, with a fair amount of competition, at good prices. *Socotrine*: Good hard pale, 90s. to 92s. 6d.; bright, but rather brown and partly soft, 77s. 6d. to 82s. 6d.; soft, but fair red colour to ordinary mixed, with stones and leaves, 67s. 6d. down to 45s. per cwt. *Zanzibars* in tins, good hard red to soft and darkish, from 60s. down to 30s. per cwt. In New York the market for *Curaçao* aloes is still on the inclining-plane, owing to the excess of arrivals over consumption. Dark brown to good liver are quoted at 15s. 6d. to 28s. 6d. per cwt., c.i.f. terms.

**AMBERGRIS.**—Several lots were shown to-day, but no sales were effected. For fine grey ambergris of good flavour, from 160s. to 165s. per oz. is asked. A new lot of four tins (about 10½ oz.) *Australian*, of good flavour, but partly white, was bought in at 110s. per oz., and several lots of dark and heavy ambergris at 35s. to 45s. per oz.

**ANGELICA ROOT.**—Prices are exceedingly high at present, and supplies are becoming smaller every day. It will be several months yet before the new root is available.

**ANISE.**—133 cases *Star* anise, of which 58 were catalogued without reserve, were offered at to-day's auctions, but not a single package was sold; the price asked privately is still 5l. 10s. per cwt.

**ANNATTO.**—The large quantity of 118 bags bright seed from *Ceylon* was shown to-day. The price asked for this article is 2½d. per lb., but there were no buyers.

**ANTIMONY.**—Thirty-eight bags crude *Japanese* were again offered this week, and an offer of 39l. per ton solicited, but there was no response.

**ARECA NUTS.**—A parcel of 20 bags was shown to-day, for which the price of 30s. per cwt. would be accepted.

**BALSAM (CANADA).**—The supply of Canadian balsam on

the New York market is light, and prices remain firm at 1s. 1¼d. to 1s. 2½d. per lb., c.i.f. terms.

**BALSAM COPAIBA.**—Our market is very steady, but the demand is slack. At to-day's auctions one case (two 35-lb. tins) ordinary cloudy, dark and thin Central American balsam sold at 1s. 10d. per lb. Reports from New York, dated February 1, mention that all grades of copaiba balsam remain exceedingly firm, the better qualities of such being mostly cleared off the market. *Carthagen* balsam is quoted at 2s. ¾d. per lb.; fine bright *Angostura* at 2s. 5d. to 2s. 6½d. per lb., c.i.f. terms.

**BALSAM (PERU).**—Firm but without much demand. Two cases good thin balsam shown to-day are held for 6s. 3d. per lb. The New York market has advanced, and very high prices have been paid, it is said, to secure the small supplies available. The quotation for good bright balsam is 6s. 5d. per lb., c.i.f. terms.

**BALSAM (TOLU).**—From New York we hear that the market there still remains depressed, while prices are again somewhat lower.

**BUCHU LEAVES.**—Very firmly held. For a parcel of four bales fine round dark-green leaves of good flavour an offer of 5d. per lb. was refused, 5½d. being named as the limit.

**CALUMBA.**—One hundred and seventy-seven packages were shown to-day, but the sales effected were very slight. For good bright yellow root slightly wormy, 32s. to 32s. 6d. per cwt. is asked, and for mixed sizes grey, also slightly wormy, 20s. A parcel of small dusty and brown root, slightly wormy, sold at 9s. 6d. to 10s. 6d. per cwt.

**CAMPOR (CRUDE).**—Ten tubs *Japan* were offered at to-day's auctions and an offer of 142s. 6d. per cwt. is understood to have been refused for them. The market is, however, entirely nominal both on the spot and for arrival, and it is said that some sales have been made from here to the Continent at 135s. per cwt.

**CANNABIS INDICA.**—Twenty-eight robbins were shown to-day, but only three of these sold at 4d. per lb. for greyish tops; fair green somewhat stalky ditto are held for 5d. per lb.

**CANTHARIDES.**—Eight cases of *Chinese* flies were all bought in. For good bold quality there were no offers at 1s. per lb.; for small size, an offer of 10d. per lb. was refused.

**CARDAMOMS.**—About 180 packages were shown to-day as being the largest supply which has been offered for some time; the quality, too, was exceptionally good, and with keen competition some 130 packages sold at an advance of 2d. to 3d. per lb. over the values. The following prices were paid: *Ceylon-Malabar*: Medium to bold full pale, 2s. 3d.; smaller size ditto, 1s. 9d.; medium to bold, but rather brownish, 1s. 10d. to 2s. 2d.; small to medium, partly round, rather light, 1s. 9d.; ditto brownish, 1s. 9d. per lb. *Ceylon-Mysore*: Very bold full plump and pale from 3s. 7d. to 3s. 9d.; medium to bold ditto, 2s. 9d. to 2s. 11d.; medium to bold pale and brownish, 2s. 1d. to 2s. 3d.; medium-sized long pale, 1s. 6d. to 1s. 10d.; smaller size, 1s. 4d. to 1s. 5d.; medium to bold plump brown, mixed and rather specky, 1s. 5d. to 1s. 6d.; medium to bold brown, 1s. 4d.; small pale, 1s. 3d. to 1s. 4d.; mixed brown and split, 1s. 1d. to 1s. per lb.; fair quality seed realised from 1s. 8d. to 1s. 9d., and one lot of very common ditto, 10½d. per lb.; good mild *Ceylon* cardamoms sold at 1s. 5d. to 1s. 8d.; lean and shelly ditto at 6d. per lb.

**CASCARILLA.**—Of 41 bales offered at to-day's auctions, 19 sold at good prices—32s. for fair small to bold silvery quill; 24s. for very thin grey silvery quill; and from 16s. down to 10s. per cwt. for dull, dusty and damaged.

**CINCHONA.**—Another heavy arrival of 177 bales South American *Guayaquil* bark was for the greater part disposed of to-day at a fresh reduction in price of at least 2d. per lb. on an average. Good bright quill sold at 1s.; partly stout ditto, bright mossy but broken, 8½d. to 9d.; very stout flat split quill, 9d.; broken and rusty brown at from 6d. down to 3½d. per lb.; 42 bales *Maracaibo* bark of good appearance were bought in at 9d. per lb. Several parcels of flat *Cubisaya* were also bought in, and only 9 serons damaged sold without reserve at 7½d. to 8½d. per lb. For a new parcel of 116 bales from Rosario, bright flat orange,



1s. 5d. per lb. is asked, an offer of 1s. 4d. being refused. Some very ordinary red bark, in thin broken quill of very little colour, realised 1s. 1d. per lb.

**COCAINE.**—German hydrochlorate is offered by the manufacturers at 20s. 6d. per cwt. in bulk; but second-hand holders might sell for somewhat less money.

**COCA LEAVES.**—Seven cases *Ceylon* leaves were shown to-day. These leaves were of mixed size, Huanoo character, dark in colour, but strong. Most of the leaves were damaged, and an offer of 2d. per lb. was the best which was made. It was refused. The New York market on February 1 was almost bare, only a few parcels of light-green leaves remaining on hand.

**COCCULUS INDICUS.**—The market remains quiet, and at to-day's auctions none was offered. The quotation is from 12s. to 13s. per cwt.

**COLOCYNTH.**—Dull of sale, and offering at 1s. per lb. for fair pale *Turkey* apple. Seven cases *Spanish* were shown—broken greenish fragments—and for these 10d. per lb. is asked.

**COWHAGE.**—Six tins of fair colour, but rather stony, sold "without reserve" at 1d. to 1½d. per lb.; common and stony ditto, ½d. per oz.

**CREAM OF TARTAR.**—The tide continues to ebb in this article. Best white French *crystals* can now be bought at 97s. per cwt. German *powder* is held for 99s. per cwt.

**CUMIN SEED.**—For *Malta* seed of fair quality 22s. per cwt. is asked.

**CUTTLE-FISH.**—Forty-one cases good pale white bone from Bombay sold very cheaply at 3d. per lb. to-day.

**DRAGON'S BLOOD.**—Only one parcel finger gum in reed, dull in colour, was shown to-day. The holder asks 6d. 15s. per cwt. for it.

**ERGOT OF RYE.**—Several parcels of good *Spanish* ergot were shown to-day. For 1 parcel "extra fine" of new import an offer of 1s. 2d. per lb. was refused. Other lots would be obtainable at the figure, and offers of 1s. 1½d. per lb. were refused.

**EUPHORBIA PILULIFERA.**—There is practically no demand for this article at present, it seems. For five cases of fair bright quality from Bombay 1s. per lb. is wanted, but only 8d. per lb. was offered to-day.

**GALANGAL.**—Twenty-four bags fair, rather dark, sold without reserve at 14s. per cwt.

**GAMBOGE.**—Of 10 cases offered 7 were sold at 12l. 2s. 6d. to 12l. 5s. for good pipe partly run, good fracture, and 11l. 5s. for more blocky ditto; these prices showed a decline of 7s. 6d. to 10s. per cwt. Another parcel of fine bright, slightly blocky ditto was bought in at the nominal price of 13l. 5s. per cwt.

**GINGER.**—At Wednesday's auctions another heavy supply of *Cochin* ginger, consisting of nearly 1,100 packages, was offered for sale, and met a dull market. Only about 260 packages sold at lower rates, the decline being most pronounced on cut *Cochin* ginger, which was quite 3s. cheaper, while rough kinds sold at 1s. decline to par. Small to bold part cut brought 35s. 6d. to 45s.; rough, partly wormy to small washed, 26s. 6d. to 29s.; cuttings, 18s. per cwt. Twenty bags *Bengal* ginger sold at 18s. per cwt.; and 28 barrels *Jamaica*, new crop, realised 62s. to 71s. 6d. per cwt. for common to good common. A parcel of 112 bags rough-sliced *Japan* ginger was bought in at 25s. per cwt. Reports from Calcutta, dated January 28, mention that there is no position in the ginger markets there; both stocks and supplies remain very small.

**GUINEA GRAINS.**—Sales are reported from Liverpool at 31s. 9d. per cwt.

**GUM AMMONIACUM.**—The supply remains very small, and is held for high prices; at auction to-day one 200-lb. case fair blocky pale almondy, partly drossy, sold at 70s. per cwt.

**GUM ARABIC.**—Nine cases fine pale picked *Kurrachee Amrad* sold to-day at 5l. 5s. per cwt.; 3 cases soft small pale *Trieste* grain at 10l.; and 3 cases fair but rather dusty *Turkey sorts*, from Alexandria, at 7l. 10s. per cwt.

**GUM BENZOIN.**—The demand for variety is exceedingly slack, and what was sold to-day had to be pressed upon the market. *Siam* gum: Good small to bright almonds, partly blocky, is held for 15l.; for hard block, consisting of pressed dust and siftings, 5l. to 5l. 5s. per cwt. was paid; a few cases very bold loose pale almonds (so-called *Singapore* character) were placed on show at the drug warehouse, but not included in the sales; six cases *Penang*, fair grey almondy, rather false packed, sold without reserve at 7l. 2s. 6d. to 7l. 7s. 6d. *Sumatra*: Fine seconds, small to bold almonds, false-packed corners, good flavour, were knocked down at 8l. 2s. 6d.—a decline of fully 10s. per cwt.; rather brown seconds, good almondy centres, 7l. to 7l. 5s. Very common dull *Penang* brought 33s.

**GUM EUPHORBIIUM.**—There is very little offering. For 12 serons, nearly all dust, partly small drop, shown to-day, 20s. per cwt. is asked.

**GUM GALBANUM (SPURIOUS).**—Of this gum, 2 parcels—one offered as "scented bdellium"—were shown. They were bought in at nominal prices up to 60s. per cwt.

**GUM GUAIAIACUM.**—The 17 boxes which arrived too late for the last auctions were offered to-day, and all sold; good small to bold loose drop, slightly woody but very dusty, 1s. 5d. to 1s. 6d.; damaged ditto, 1s. 3d.; partly drossy hard, 1s. 3d. per lb.

**GUM KINO** is very scarce, and would doubtless find a ready sale if offered, as there have been several inquiries.

**GUM MASTIC.**—From Smyrna we hear that a strong demand has sprung up for this article, resulting in large sales at advancing prices—viz., 2s. per lb. f.o.b. The tendency is still advancing.

**GUM MYRRH.**—The demand for this article has slackened considerably since the last auctions, and of 67 packages offered to-day about 33 sold at easy rates. Dark red native-picked (*Aden*), 72s. 6d. to 75s.; fair siftings, 49s.; pickings, 40s. to 42s. 6d.; and dust, up to 25s. per cwt.

**HONEY.**—The market remains exceedingly firm, but the demand appears to have slackened to some extent. Good hard pale *Chilian* is held for 48s. per cwt., and 100 cases *Californian*, good grey and amber liquid, were bought in at 50s. per cwt. Of *Jamaica* honey only one barrel fair brown liquid was offered, and sold at 41s. per cwt.

**INDIGO.**—The East Indian season is now at an end, and, in a report from Calcutta, dated January 28, the results are summarised as follows:—In quality *Bengals*, though better than last year, were below average. The *Behar* crop showed an unusually large proportion of good and fine qualities with less than usual of ordinary and drossy descriptions; *Khoonties* were small in quantity and poor in quality. *Benares* indigo was pretty good considering the small crop, whilst there were few fine and really desirable *Ordes*, but a heavy proportion of middling and ordinary qualities. The crop prospects for the ensuing season continue favourable. The output of indigo in the season 1890–91 was the smallest on record for the last ten years. It is noteworthy that the direct shipments of indigo to the United States are very largely on the increase, from 8½ per cent. of the total in 1880–81 her purchases have advanced to 17 per cent. in 1890–91. Germany, England, France, and Russia are the next largest buyers.

**IPECACUANHA.**—Thirty-seven serons *Rio* were offered to-day, and of these 32 sold, with good competition, at an advance of fully 2d. per lb. on the last auctions, good stout sound root realising 8s. to 8s. 2d.; ditto, but slightly damaged, 7s. 11d. to 8s. per lb.; one barrel of *Carthagen*, very much damaged, sold at the comparatively high price of 5s. 9d. per lb.

**JALAP.**—Still on the decline. Of 27 packages offered to-day 3 sold at 1s. 2d. per lb. for fair rather small mixed *Vera Cruz*; another lot, rather heavier root, was bought in at 1s. 9d. nominally, an offer of 1s. 3d. per lb. being refused. The bulk of that offered consisted of the pale sliced tubers which have recently made their appearance in our market, and they are said to be the produce of a district from which no Jalap has until now been received. The slicing of the root is said to be done purposely, in order to make it dry



more quickly. For a parcel shown to-day, of which a part was slightly wormy, 1s. 4d. per lb. was the price.

**JUNIPER BERRIES.**—A parcel of 127 packages said to be eight years old, and to have cost originally 6d. per cwt. sold to-day without reserve at from 9s. to 9s. 6d. per cwt.

**KAMALA.**—Good quality is said to be still selling privately at 10d. per lb.; 4 cases very dusty were shown to-day, and are firmly held at 6d. per lb., an offer of 1d. less being refused.

**KOLA NUTS.**—The supply remains rather large, but the demand, although prices are low, is also keeping up fairly well. For *West Indian* kolas, good dry brown split, 4½d. to 5½d. was paid to-day; ditto grey mouldy, 3d.; and chips, 1½d. to 1¾d. per lb.

**LOOFABS.**—Fifteen bales *Japanese* loofabs, irregular shape and length, and very brown, were bought in, the price suggested being 1s. 6d. per dozen.

**MUSK.**—The market is exceedingly weak, and easier for all qualities except the finest thin skin pods, of which the price is still fairly well maintained. Of *Tonquin* pods, first pile, some fine small to bold thin blue skin and under skin, fairly dry, were bought in at 85s. per oz.; of similar but grey skinned pods two caddies sold at 80s. per oz.; and for 3 tins old-fashioned rather skinny and damp pods 54s. 6d. per oz. was accepted, being a decline of about 6s. per oz.; 10 tins third pile pods, damp skinny and badly trimmed, sold at 24s. to 30s. per oz., and for 1 tin thick skinny genuine but damp, 40s. 6d. per oz. was paid.

**MUSK SEED.** For a parcel of 9 boxes *West Indian* musk seeds 3½d. per lb. was refused, the price being 5½d. per lb. Another parcel of 12 cases, however, sold for 3½d. per lb. without reserve.

**NUX VOMICA.**—For 111 bags fair ordinary rather dark but silky *Madras* 9s. to 9s. 6d. per cwt. was accepted to-day.

**OIL (CASTOR).**—Quiet and easier; fair *Calcutta* seconds are worth 3½d. per lb. on the spot, and 60 cases sold to-day at that price, while for good firsts 4½d. per lb. is the price, and 10 cases fine ditto sold at 4½d. per lb. to-day.

**OIL (COD-LIVER).**—Reports received here from Hamburg to-day report a sudden advance in prices, and quote 85s. c.i.f. per barrel. It is said that the new oil is coming forward very slowly.

**OILS (ESSENTIAL).**—China mail reports, dated January 15, speak of a considerable decline in the price of oil of *Star-anise*. At to-day's auctions 2 cases of a parcel of unworked oil were reported sold at 6s. 10d. per lb., and 6 cases *Cassia* oil were also said to have been disposed of at 3s. 8d. per lb.; for another lot 3s. 7d. was refused. Thirty boxes brown *Japanese Camphor* oil sold at 24s. per cwt., "subject to approval"; and of a parcel of 12 cases Australian oil of *Sandal-wood*, "guaranteed pure," 2 cases sold (twelve 1½-lb. bottles) at 13s. 6d. per lb. For *Rose* oil, from Bombay, 5½d. per oz. is asked; and a parcel of *Nutmeg* oil, from Penang, was bought in at 6d. per oz. *Cajuput* oil: We hear that prices remain firm at 3s. 7d. to 3s. 8d. per bottle (about 1½ pint) for fine green-coloured oil, c.i.f. London. Nine cases shown at to-day's auctions were bought in at the latter price. Of *Citronella* oil, 50 cases in tins sold to-day at ¾d. per oz.; while for oil in bottles ¾d. is asked by some holders. The American stock of *Sassafras* oil is said to be lessening considerably; and, although prices still remain low, an advance is predicted shortly.

**OPIMUM.**—There is hardly anything doing in the London market this week. At the auctions to-day a case of very common mouldy *Egyptian* opium, said to contain 290 per cent. of morphia, was bought in. The owner would take 3s. per lb. for it. From Smyrna we hear, under date of January 31 that during the month of January about 130 cases were sold. In the last week of January a considerable decline in value occurred. The reports from the interior regarding the growing crop are good. There have been excessively severe rains in some districts, which at one time threatened considerable danger to the low-lying parts, but fine weather has returned in the nick of time, and the damage, if any, is likely to be very small. Hence, if fine spring weather supervenes, the outlook will be exceedingly favorable. On February 7 the Smyrna

market closed weak and dull. A private correspondent confirms these reports. He says that the fine weather and northerly winds have every prospect of continuing. The opium planters were rather frightened of the long-continued rains, which would have materially injured the young plants if the wet weather kept on. The market keeps quiet, the only sales effected being about 11 cases of the manufacturing kinds at a reduction of 3d. per lb. The arrivals up to February 7 are 1,576 cases, against 1,870 at the same period last year. The stock in first and second hands is estimated at about 1,200 cases, and in the interior at 250.

**ORANGE PEEL.**—Firmly held among the parcels shown to-day, which were rather numerous, were some very fine bright thin gelatino strips from *Malta*, for which 1s. 2d. per lb. is required, an offer of 1s. 1d. being refused, the price being 1s. per lb.

**PURKEE.**—One case of 80 lbs. sold without reserve at 3s. 6d. per lb.

**QUASSIA WOOD.**—Still advancing in price. For 10 tons shown to-day 7l. 5s. is asked, and an offer of 6l. 10s. was refused; and for 15 tons of logs 8l. 10s. is required. The owner is said to have refused 7l. 15s. for it, which would show an advance of fully 15s. per ton.

**QUICKSILVER.**—The price is well maintained at 8l. 12s. 6d. per bottle from the importers and about 1s. less in second hands.

**QUININE.**—Some business in second-hand German bulk was done a few days ago at 11d. to 11½d. per oz. During the last few days no transactions have transpired; but there are sellers at 11d. per oz. At the auctions to-day 5,000 oz. *Brunswick* were shown, and bought in at 11½d. per oz. nominally.

**RHUBARB.**—Of 176 packages *Chinese* rhubarb shown to-day only about 40 sold at barely the last sale rates. *Shensi*: Medium to bold bright cut, slightly rough, good fracture, 2s. 2d. per lb.; round druggists' root, 1s. 10d.; bold fair, partly rough coat, three-fourths pinky fracture, spongy round, 1s. 7d.; small to medium ditto, 1s. 5d. to 1s. 6d.; flat, 1s. 5d.; fair pickings, round and flat, 11d. per lb. *Canton*: Small to medium fair coat, even pinky fracture, round, 1s. 5d. to 1s. 6d.; bold orange, slightly wormy, three-fourths pinky fracture, round, 11½d.; flat, 1s.; fair medium to hold good fracture, flat, 1s. 4d.; small ditto, 1s. 2d. per lb. *High-dried*: Small to medium wormy fair, three-fourths pinky, one-fourth dark, 1s. 2d. per lb. For 16 packages *Rhapontica*, small pale and wormy root, 2½d. would be accepted.

**SARSAPARILLA.**—The supply offered to-day was very small; 2 serons *Honduras* sold at 1s. 5d. per lb.; for a parcel of another brand, 1s. 7d. is required. One hale native *Jamaica*, fine red colour, slightly damaged, brought 1s. 4d., and 6 bales chunky *Guayaquil* sold at 1s. for sound and 10d. for damaged. New York reports an active demand for *Honduras* sarsaparilla, which is quoted at 1s. 4½d. to 1s. 6½d. per lb. c.i.f. terms, according to brand; for the best brands, however, much higher prices are asked. The following figures show the statistical position of this article in New York:—The arrivals during the year 1890 were 1,325 bales; the stock on December 31, 1890, 367 bales; and the sales and exports by receivers, 1,540 bales, leaving a stock of only 152 bales on hand at the commencement of the present year.

**SENEGA ROOT.**—Two shillings per lb. is still the price for good bright quality.

**SENNA.**—About 180 packages were offered, and nearly all sold at very full and slightly higher prices; the quality was very low. *Tinnevely*: Medium greenish, part yellow and specky leaf, realised 3d. to 3½d.; small and common, 2d. to 2½d.; specky, small yellowish to ordinary false packed, from 1½d. down to ¾d. per lb.; 20 packages *Alexandrian* senna, fair medium green leaf, were held for 6½d. per lb.

**SHELLAC.**—At the weekly drysaltery sales, which since the break-up of the "ring" practically form the only market for the article, a very large supply was again offered. The sales took place on Wednesday, instead of on Tuesday, on account of the fog which prevailed. Of 2,890 cases offered, 1,422 sold at the slight decline of 1s. per cwt. on second orange—not an unsatisfactory result, considering the heavy



supply. Good bright red *second orange* sold at 63s. to 69s. per cwt.; medium to fair ditto, at 57s. to 62s. per cwt. *Button lac*, fair to good first, 67s. to 75s.; thirds, at 60s. per cwt.

STICKLAC, which until recently was firmly held at 70s. per cwt. nominally, for fine Siam, suffered a heavy decline on Tuesday, when 220 cases sold without reserve at 48s. 6d. to 50s. 6d. per cwt. for slightly dusty but good quality.

SULPHUR.—Foreign *Flowers* are held for 6s. 6d. per cwt., and *Roll* sulphur at 8s. 6d. per cwt. English brands are 2s. per cwt. above these prices.

TEA.—The tea market remains steady for most grades, but there is a marked indisposition to buy, and a prevalent idea that prices may be a little lower before long, though the wish is probably father to the thought in many cases. Common Congou fetches 6½d., and anything above common is wanted at 7½d. per lb. There is a remarkable scarcity of fine red-leaf tea, Chingwo Pecco Congou and Soomoo, with quality, being practically non-existent. *Assams* are possibly a trifle easier for lower grades here and there, but the terminal market is as high as ever, and any Assams with taking liquor are very hotly competed for. The heavy *Ceylon* sales on Tuesday were delayed an hour by the fog, and lasting till 5 o'clock in the afternoon, went irregularly here and there, but, generally speaking, last week's prices were fully maintained.

TONQUIN BEANS.—The demand is very slack, and holders still require full prices. For rather dull *Pará* 2s. 10d. was refused to-day, and 3s. 6d. is asked for good brown ditto. From New York we hear that *Angostura* beans are rather less firmly held, many holders showing more disposition to effect sales in order to stimulate the lagging demand. The quotation is 6s. 7d. per lb. c.i.f. terms. *Parás* and *Surinams* were arriving freely, and the market was falling.

TURMERIC.—The market remains quiet but steady: Good to fine bright *Madras* finger is worth 17s. 6d. to 19s., and *Bengal* from 15s. 6d. to 16s. per cwt. Split *Cochin* bulbs are held for 8s. 6d. to 9s. per cwt.

VANILLA.—The supply offered to-day brought steady prices: Good small chocolate, 7½ to 8 in., 15s. to 16s.; 6 to 7 in., 10s. 6d. to 13s.; 3½ to 5½ in., 7s. to 10s. 6d.; brown foxy mouldy, and irregular mixed, from 11s. down to 2s. 9d. per lb.

## CHEMICALS IN THE NORTH OF ENGLAND.

THERE is a good demand for heavy chemicals, which are moving off more freely. Caustic soda and soda ash are specially firm.

BICARBONATE OF SODA.—Steady at 7l. to 7l. 5s. per ton in 1-cwt. bags, f.o.b. Liverpool.

BLEACHING-POWDER.—In better demand at 6l. 11s. 3d. to 6l. 12s. 6d. on rails at makers' works; and 6l. 15s. per ton f.o.b. Liverpool, in softwood casks. Packed in hardwood casks, the price is 7l. per ton, f.o.b. Liverpool. There is no change to report in Tyne market, but better demand reported; prompt quotations are 6l. 15s. for softwood casks and 7l. per ton for hardwoods, f.o.b. Tyne.

CAUSTIC SODA continues brisk, with an advance in 70-per-cent. in the Tyne market. Liverpool market firm, and good business reported for prompt and forward: 60-per-cent., 10l. per ton; 70-per-cent., 11l. 5s. per ton; 74-per-cent., 12l. 5s. per ton, f.o.b. Liverpool; 70-per-cent., 11l. 10s.; and 77-per-cent., 12l. 7s. 6d. per ton net, f.o.b. Tyne.

CHLORATE OF POTASH.—Unchanged at 5½d. per lb., less 5 per cent. discount, prompt delivery at usual ports of shipment. For forward February–December price quoted is 5½d. to 6d. per lb.

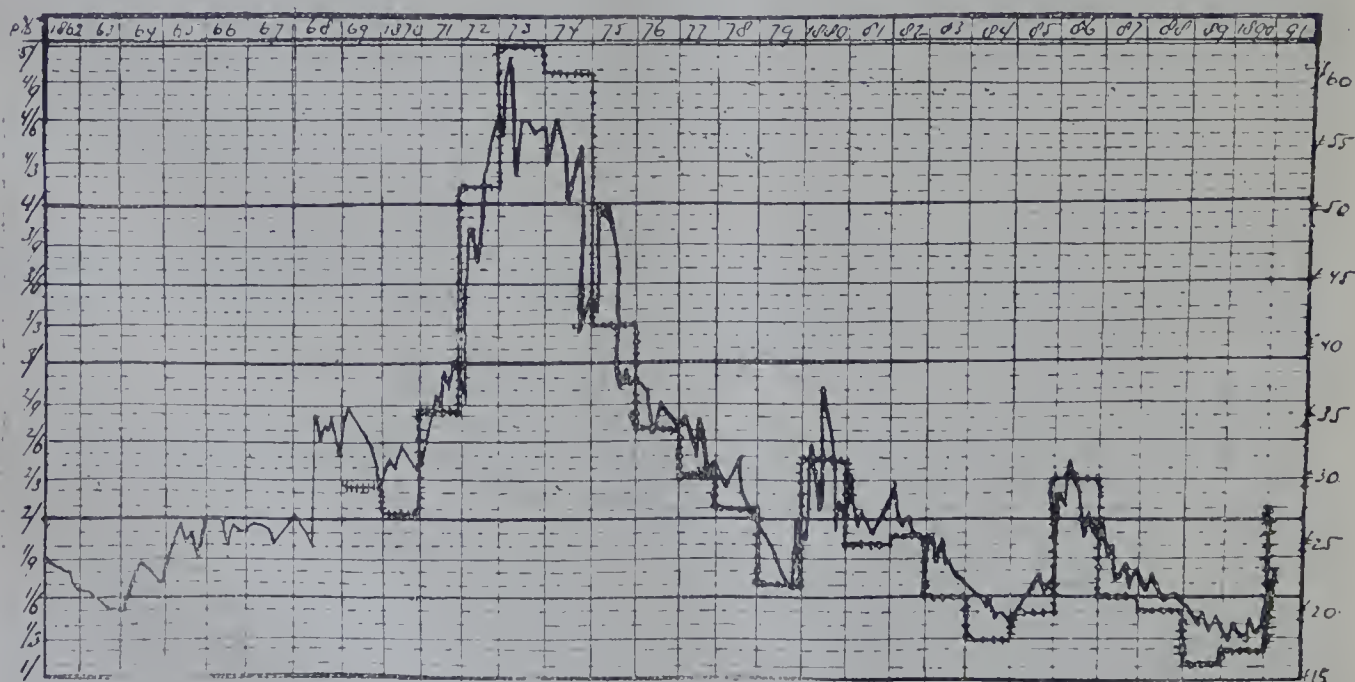
CREAM CAUSTIC.—Very steady at 9l. 10s. per ton on rails at makers' works, and 9l. 12s. 6d. per ton, f.o.b. Liverpool.

HYPOSULPHITE OF SODA.—In good demand at 6l. 10s. per ton in 5 to 7 cwt. casks, and 7l. per ton in 1-cwt. kegs, net cash, in large quantities, f.o.b. Tyne; c.i.f. Liverpool 7l. and 7l. 10s. per ton; delivered Manchester, 7l. 2s. 6d. and 7l. 12s. 6d. per ton in casks and kegs. Small parcels quoted from 10s. to 20s. per ton extra, according to quantity.

SODA ASH.—Very firm and scarce, especially for favourite brands. Carbonated quoted from 1½d. to 1¾d. per degree, and Caustic ash 1½d. to 1¾d. per degree, f.o.b. Liverpool. Tyne brands of carbonated quoted 1½d. per degree, less 3½ per cent.

SODA CRYSTALS.—Steady at 3l. 7s. 6d. to 3l. 10s. per ton on rails at makers' works, 3l. 10s. to 3l. 12s. 6d. per ton, f.o.b. Liverpool, and 2l. 16s. per ton f.o.b. Tyne.

## FLUCTUATIONS OF CITRIC ACID AND LEMON-JUICE.



THE black line in this diagram indicates the course of the price of citric acid during the last thirty years. It has been drawn from the records supplied by the file of THE CHEMIST AND DRUGGIST since 1861. The barbed line shows the

average prices of lemon-juice during the last twenty years. For these prices we are indebted to the kindness of Mr. Sturge, of Birmingham.





### Memoranda for Correspondents.

*Always send your proper name and address: we do not publish them unless you wish: if you do not, please use a distinctive nom-de-plume.*

*Write on one side of the paper only; and devote a separate piece of paper to each query if you ask more than one, or if you are writing about other matters at the same time.*

*If you send us newspapers, please mark what you wish us to read.*

*Ask us anything of pharmaceutical interest: we shall do our best to reply.*

*Before writing for formulae consult the last volume, if you have it.*

*Letters, queries, &c., will be attended to in the order received.*

### The Japan Market.

SIR,—In the year 2544 of the Japanese era—computed from the year of the birth of the first Emperor of Japan—equivalent to 1886 Anno Domini, I made a tour through the principal part of Japan, which tour gave me a far greater supply of ideas for after-reflection and careful thought than was gathered from travel and careful observation through any other Eastern country. The climate is similar to that of Italy, the country mountainous, and presenting views equal to any I have seen in Italy or New Zealand, and very similar in character, as would naturally be anticipated from their respective natural geographical situations. The Japanese people are most artistic, energetic, particularly clean, and, if anything, a little too enterprising and imitative. This last characteristic of the Japanese will shortly show evident manifestations of its pernicious effect on Japanese art—especially in their bronze, ivory, and wood work—modern ideas are speedily rooting out those good old artistic conceptions so much prized by archaeological connoisseurs.

While Japan is exceedingly good for the overworked and the tourist, it does not offer such a good field for foreign commercial enterprise as many other foreign countries. This seems an anomaly after describing the Japs as an enterprising people, and may want some explanation. Example: Introduce some new article of commerce to them, it matters not whether it is a new drug or a steam engine—they will first try the novelty; and, secondly, make it themselves. This always has been characteristic of the Japanese. Looking back to the first steam man-of-war they purchased, which they captured by one of themselves—a little sooner, perhaps, than was wise—with the result that the steamer started off and all went well until they wanted to stop it—a piece of knowledge the captain had not collected—and so the man-of-war was steered round and round on the teetotum principle until a stoppage was effected by steam exhaustion. I mention this little story by way of giving a practical illustration of a very important fact from a commercial point of view, which should not be overlooked before a foundation, which involves the outlay of capital, for a trade in Japan is commenced. There are many other points that could be enumerated to give more cogent effect to my meaning, and words of caution to those contemplating making a bid for the Japanese trade; but I will content myself, and spare my readers' feelings of monotony, with one only—and that is in reference to the stringency of the Japanese Government to prohibit all foreigners from building or occupying any premises whether for industrial or commercial purposes, outside the actual port or treaty towns of the country, which are very limited indeed. The result of this is that in the principal large cities, where the masses are, foreigners are shut out entirely. In Tokio (formerly Yeddo), a city as big as Paris in population, and the seat of the residence of the Mikado, there are only a few acres of land set off for the English concession, as it is called, where only Government servants such as engineers, masters of their English schools, inspectors of mines, &c., are allowed to reside. And if the custom of supplanting these gentlemen by their own pupils is maintained as actively as it was when

I was there, I should conclude that Japanese gentlemen now occupy the seats of their old masters, who are quietly disposed without ceremony.

The result of all these narrowings of passages for enterprising foreign commercial houses practically places an effectual barrier between the Jap and the foreigner. And by way of illustration take the drug trade. As far as my memory serves me, there are six English chemists' shops in the whole of that vast country of thirty million souls; and these six are not wholesalers in any sense of the word, but appear to exist for the benefit of the English and American doctors, the missionaries—who are very numerous—and the handful of foreign residents.

All through the Japan schools, and matters foreign, Germany takes priority over England, the reason of which is guessed at by those in the know.

I enclose the title-page of a small pamphlet given to me in the medicine-street at Tokio. In the East and far East all trades and businesses of the one kind are concentrated in a sense—kept separately from others—from which you will get another example of the wanting-to-run-before-they-can-walk and throw-aside-old-custom sort of character, which does most unmistakably painfully force itself upon the visitor at every turn. You will see from the title-page referred to the words trade-mark. Why, I don't know, for I never heard of a trade-mark law of Japan; but upon what they will do now they have got an elective Parliament it would be difficult to speculate. There are thousands of Japanese druggists and doctors, and very intelligent men are to be found amongst them. Some of their medical journals are most interesting, and a very large proportion of the modern medical men have studied at German or English Universities.

I am, Sir, yours, &c.,

WILLIAM SHEPPERSON, F.R.G.S.

50 Holborn Viaduct, London, E.C.

The handbill sent with the above letter contains some Japanese characters, with a flying swan and a picture of a fish, and the following words in English:—

Jelly of Cod-liveroil. Trade-mark. This jelly contains following matter in one hundred:—60 of cod-liver oil; 16.6 of milk; 4.16 of white of egg; 8.33 of refined sugar; 10.83 of isinglass, aromatic and water.

The jelly of cod-liver oil must be drunk in a week, because it becomes bad colour and fermented; but if its flask is covered with cork it is permanent for years.

### Pharmacy on the Riviera.

SIR,—The statements advanced by Mr. Ashton in his lecture on "French Pharmacists and Pharmacy," delivered at the last meeting of the Junior Association of Pharmacy of Brighton are so contrary to fact and generally misleading that in justice to the French chemists on the Riviera, as a late ten years' assistant in various parts of the South of France, I would ask you to allow me to enter my protest against his assertions.

First, then, although not generally so neatly fitted as similar establishments in England, with few exceptions, the pharmacies in all the four towns, from Cannes to Mentone, are well kept, and in many cases the fittings compare favourably with the majority of businesses with us. It is not fair to say that the "cleaning and dusting is left to the porters," as it is part of their work and is generally very effectively done: no assistant is expected in a good French pharmacy to do work of this kind at all. It should be understood that the French "garçon" holds a very different position to the English porter, the former generally doing most of the work of the laboratory, making syrups, distilling waters, putting up stock, and frequently serving the smaller and poorer class of customers, and holding a generally confidential position in the house. Although not so particular as to his personal appearance as the English assistant, during a long stay on the Continent I never met the type of French assistant Mr. Ashton describes, and I certainly do not know a pharmacy on the Riviera where he would be tolerated. Eccentric and careless, from our standpoint, he may be; but when one considers his meagre pay and his long working hours, generally from three to four hours a day longer than in England, a little of both may be excused; I may mention that I myself have worked in a business in the



south where we opened at 6 A.M. and closed at 11 P.M. Sundays and weekdays.

With regard to obtaining the diploma of pharmacien, an authorisation to present oneself for the examinations must first be obtained from the Minister of Public Instruction, as well as a dispensation from attending the courses of lectures and passing the "Examen de 4<sup>me</sup>" (corresponding to our Preliminary); but, at the same time, all the attendant fees must be paid, and as they amount in all to over 1,200f. (48*l.*), they can hardly be considered "ridiculously low." The Major qualification gives no advantage to an aspirant in any way. I was the first Major man (and I think there have only been two others since, and one of these is dead) who presented himself for examination in the South, and I got no advantage which my only predecessor, a "modified," did not enjoy. In presenting himself the aspirant for the diploma of second class has simply to state in which department he wishes to establish himself, his apprenticeship having nothing to do with the matter.

The charge for embalmments varies according to the means and position of the deceased; 1,500f. used to be the average price. I never knew less than 1,000f., and have known several cases where 5,000f. were paid.

I am sorry thus to challenge categorically Mr. Ashton's statements, but this gentleman would really appear to have gone out of his way to misrepresent the true state of affairs.

Yours truly,

PHARMACIEN. (245/13.)

#### Leather Bottles.

SIR,—The leather bottle inquired about by your correspondent was originally imported from the East Indies containing castor oil. I had one of them in use for neatsfoot oil as late as 1841, but I believe it was then more than ten years old, as I don't think they have been imported since 1820. They used to be called "dippers;" I know not why.

Yours truly,

Hull, February 16.

JOHN S. LINFORD.

SIR,—The leather bottles spoken of by "Peak Forest" are called "dippers," and were used formerly for the importation of castor oil from the East Indies. They were in use for that purpose fifty or sixty years ago, but were beginning to go out, and tins more frequently employed in their place. The material is not leather, but skin of animals prepared in some peculiar way, and shaped on a mould.

Cheetham Hill, February 16.

W. WILKINSON.

#### Remnants of Ancient Pharmacy.

SIR,—Taking great interest in antiquarian lore, I have read with much pleasure your article on "drug pots," and Mr. Hodgkin's letter of February 7.

For many years I have had an ancient cabinet of *materia medica*. It is a handsome piece of furniture about 8 feet high and 3 feet square. The upper part is enclosed by two doors, panelled with mirrors, which, when opened, represents an apothecary's shop of the seventeenth century. At the back of the shop are two carved and gilt cherubs holding aloft a crown cleverly composed of medicinal fruits and seeds, and below a scroll, on which is inscribed—

Pietas, Scientia, Temperantia, Vigilantia & Studium  
Assiduum ornant Pharmacopœum.

Upon the shelves round the shop are old delft pots, plain and spouted, and from their size must have been specially made for the shop. The back of the shop slides up and reveals a nest of several hundred drawers, each of which is divided into compartments, and contains the roots, leaves, flowers, barks, resins, gums, animal matters, minerals, &c., used in medicine. Each drawer is partitioned differently and symbolic of its contents. There is a long drawer at the top for sundries, and on the front is inscribed—

IN LAVDEM RECEPTACVL TAM SIMPLICIVM QVAM  
COMPOSITORVM MEDICAMINVM.

I found in one of the bottles, labelled "Elixir Vitæ," a mysterious white powder; but it is evident the maker did not find it a success.

The pot labelled "U. Diapomphos" contains some of the substance, and must be as old as the cabinet. The earthenware are very curious, and are stamped with the arms of the cities where they have been prepared.

Yours very faithfully,

HENRY O. HUSKISSON.

Swinton Street, Gray's Inn Road, London, W.C.,

February 18.

P.S.—I append a list of some of the labels on the delft pots:—

Pass : Puro	E. Diapron : S.	Cynoglos.
Hierocoloc	E. Sue : Rosar :	Z : Z : C.
Myrab : o	Cer : Stom :	Oxym : S.
O. Vulpin	Philon : R.	Oxym. Scyb :
O. Nutrit.	S. Stradic.	F. Theriac A.
O. Nepita :	S. Beton :	P. Aloethan.
O. Scorpion	S. Menth.	R. Cichor :
O. Ruthæ	S. Symphyt :	M. Diamor : N.
O. Chamomil	S. Myrtin	M. Rorism
O. Hyperic	S. Diachnic	M. Rosar : S.
U. Egyptica	S. Diatrees	F. Fœtid : M.
U. Diapomph :	S. Rosar : S	Mithrid : D.
U. Althæa. S.V.	S. Absint : c	C. Absint. R.
U. Vervin	S. Chamomil	C. Cydneor
U. Nervinum	S. Gayeyrth.	C. Rosar :
U. Basilicum	S. Tricol. s	C. Borrag :
U. Pomatum	S. Diagalz	C. Rosar : R
E. Senedlax	G. Arant : c :	C. Beton
E. Diacathol	Req : Puer :	C. Salvia
E. Diathœa :		

Mummy's flesh is in one of the drawers.

#### Society of Public Analysts.

SIR,—Our attention has been called to a paragraph in your issue of February 7, in which, in the course of a short report of the annual meeting of this Society, you say that the Society does not, so far as you are aware, publish a financial statement. May we so far correct this remark as to say that, in accordance with the custom of the Society, the accounts for the year were presented in full detail at the annual meeting, and the balance-sheet embodying them ordered to be circulated in the usual way among the members? For your information, should you desire it, we have pleasure in enclosing the printed copy of the balance-sheet as presented and circulated.

We are, Sir, yours faithfully,

THE HONORARY SECRETARIES.

#### The Pharmacopœia.

SIR,—While comparing the first British Pharmacopœia (1864) with our present one and its Additions (1890), I was struck by the advancement made in chemistry and pharmacy. Crystalline substances, alkaloids, and numerous galenicals now predominate, which appear to have been practically unknown thirty years ago. When we glance at the nomenclature and the various synonyms, which are dangerously alike, we see how essential it is for the safety of the public that these preparations should be handled by the most careful and conscientious. In order to keep pace with the progress in science, steps are being taken to advance pharmaceutical education; and as a reward for the increased pressure, I trust the Council may yet see their way to reconsider their resolution and decide to ask Parliament to grant us a certain measure of protection from pirates and the inexperienced.

Yours faithfully,

VEDEL. (245/7.)

#### Chemists as Electricians.

SIR,—I had a visit last week from a gentleman who brought in an invalid's electric bell, and asked if I could kindly tell him how to fit it up, remarking, "I have been to Mr. Blank and Mr. Dull Times, and neither could tell me how to set it going." I immediately rigged it up for him, the battery being the ordinary Leclanché cell, and on his asking the important question, "How much?" I replied, "Twopence for the sal ammoniac"; and immediately he said, "Oh, no! if I went to an electrical-bell fitter, he would



charge me at least 2s. 6d.; so I'll give you that and thank you." Since then he has been a regular customer, and I have taken more than one half-crown since then. The moral is obvious. Why should not more chemists add this business as a branch—not actually bell-fittings, but the sale of electric bells and battery, &c.? The actual cost of any instruction required may be limited to a few shillings spent in the purchase of one or two good handbooks

Yours, &c., SPARK. (241/91.)

#### Campho-Phenique.

The Phenique Chemical Company, of St. Louis, write to us in reference to a paragraph published by us on January 24, wherein we quoted from *New Idea* a statement made by Dr. J. Robinson that he had made this substance long before the article was patented, his formula being:—

				Oz.
Purified carbolic acid	..	..	..	1
Camphor	..	..	..	1

Mix, and make a solution.

The company who have registered the title (not patented the formula) say that the fluid resulting from mixing phenol and camphor does not resemble their article either in physical or chemical qualities, nor in physiological action. They add that "a number of cases of severe burns have been reported to us as having been caused by the use of campho-phenique," and in every instance it had been found that the material at fault has been made after Robinson's formula and substituted for their preparation. Campho-phenique is a definite chemical compound, which may be poured pure on the tenderest skin without causing even a reddening, and this despite the fact that it consists of 505 parts of crystallised carbolic acid to 495 parts of camphor in the 1,000 parts. The method of combination adopted is to bring the ingredients together in a state of volatilisation, condensing at a definite temperature.

#### DISPENSING NOTES

*The opinions of practical readers are invited on subjects discussed under this heading.*

#### What is Magnes. Carb.?

SIR,—The other day I had to dispense a prescription containing magn. carb. and magn. sulph. I put in the magn. carb. pond., but my governor afterwards informed me that I ought to have put in the magn. carb. levis, and he further stated that when magn. carb. occurs in a prescription the *light* is always meant. This, however, was not my opinion, but as I had no one else to refer to, I had, for the nonce, to take his opinion as the correct one. I should feel obliged if you would afford space in your columns to state whether the light or the heavy magnesia is understood when the prescription merely states "magn. carb."

I am, &c.,  
NOVIATIE. (241/19.)

["The Art of Dispensing" is clear upon this point. It says (p 20): "There should be no hesitation in giving the heavy carbonate when magnes. carb. is ordered." There was little doubt about the matter until the 1885 Pharmacopœia appeared. Before that "magnesiae carbonas, B.P." was the heavy article. That title is now given as a synonym of "magnesi carbonas ponderosa," which is the same thing.—ED. C. & D.]

#### Saline and Rose Mixture.

SIR,—The mixture mentioned by "Vera" (237/55) will be pink in colour only if syr. rosæ has been coloured with cochineal or aniline colouring (which is sometimes done) instead of rose petals, the colouring-matter of which becomes green with alkalis; so also does syr. violæ, which the writer has sometimes taken advantage of in preparing simple cough mixtures containing am. carb., &c., as a disguise.

ADELAIDE.

#### Nux and Caraway Mixture.

103/33. *Query* has had trouble with a customer about an acid mixture, containing tincture of nux vomica and caraway-water. It was opaque and flocculent on standing, another chemist's was clear and remained so. This is a matter of filtration. It is a safe rule to filter nux mixtures. The flocculence is due to fatty matter, which is therapeutically inert.

245/4. *Gargar.*—It would be much better to add  $\frac{1}{2}$  oz. of mucilago to the gargle rather than filter off the deposited myrrh. The acacia mucilago would keep the resin suspended, and there would be some hope of it doing good.

#### LEGAL QUERIES.

244/62. *C. D.*—If A, a chemist and druggist, and B, an "analytical chemist" (but not a registered chemist and druggist), become partners, and carry on the business of a chemist and druggist, selling poisons, &c., B is liable to a penalty under the Pharmacy Act. There is no law to prevent either of them doing analytical work.

108/17. *T. L. H.*—You must apply and register separately for each class in which you wish to have a trade-mark registered.

244/72. *J. J. W.*—The title "vaseline" is the registered trade-mark of the Chesebrough Company, and can only be applied to the preparations which they manufacture.

243/36. *Chough.*—It is not certain that an article would be "a preparation of opium" from a legal point of view simply because laudanum is one of its ingredients. See section on Preparations of Poisons on page 325 of this year's DIARY. The article you mention may be a poison, but no one except the Pharmaceutical Society could sue an unregistered person for selling it, and at present that body (rightly, we think) refuses to enforce its doubtful powers in respect of proprietary articles.

243/71. *Samphire.*—We reported a case in January, 1880, when the recorder at quarter sessions reversed a magisterial decision, fining a vendor under the Sale of Food and Drugs Act who had sold baking-powder containing alum.

247/20. *Alocs.*—According to the statement you give, you are not in any way responsible for the death of the horse. If you are sued, you have simply to tell the court the exact circumstances.

247/27. *Colic.*—You are not at liberty to make tincture of opium for veterinary purposes with methylated spirit, tincture of opium being a preparation capable of being used internally as a medicine.

247/24. *Ginger.*—Chemists, like other tradesmen, are required to have all their scales stamped.

246/48. *Herbert.*—We are not sure what agency you mean. There are several of the kind you name, but we would not care to advise you to go in for either unless you get complete information, and until you get goods do not pay any money.

247/8. *West Sussex.*—Quinine wine of Pharmacopœia alkaloidal strength may be sold by chemists without a wine licence. We do not know whether the brand you name is of such strength. Ask the makers. The law does not allow you to sell any spirit of wine without a spirit licence, but the Commissioners have stated, through this journal, that they would allow chemists to sell not more than 8 oz. for medical or scientific purposes.



## MISCELLANEOUS INQUIRIES

Correspondents who ask replies to be inserted "this week" or "next week" are reminded that we do not guarantee replies, and that their insertion depends upon the space at our disposal for such matters. It is generally impossible for us to find room for queries the same week they are received.

235/46. *J. J. (Montreux).*—Try the formula given in our issue of January 31, page 164, with the addition of 10 grammes of gum arabic and the same of sugar.

240/54. *Subscriber (N.W.).*—Dispensing for Doctors.—The rates charged are generally 1d. per oz. for mixtures, with a minimum charge of 3d. or 4d.; powders, 3d. to 6d. per dozen; pills, 3d. a dozen; ointments, 2d. to 4d. per oz., according to nature; lotions, half the price of mixtures. Expensive drugs excepted. In all cases the charges do not include pots or bottles.

240/31. *Patagonia.*—To make Double Chloride of Gold and Potassium, dissolve 30 grains of chloride of gold, and  $\frac{7}{8}$  of chloride of potassium, each in as little hot water as possible. Mix the solutions, and allow the double salt to crystallise out.

238/57. *Cacodyl.*—Ferrous Oxalate Developer (one solution):—

Neutral potassium oxalate .. ..	2,600 grs.
Ferrous sulphate .. ..	975 "
Citric acid .. ..	100 "
Boiling distilled water .. ..	20 oz.

Dissolve.

One part of this solution to be mixed with 3 parts of water for developing.

240/56. *Musk.*—It seems to us that the perfume is a fair jockey club, with less Tonquin bean in it than usual.

240/23. *C. B. Smith.*—White precipitate ointment.

239/29. *D. & S.*—Your Baking-powder contains rice flour, alum, and bicarbonate of soda. Proportions generally used are:—

Burnt alum .. ..	8 oz.
Bicarbonate of soda .. ..	8 oz. 5ij.
Ground rice .. ..	1 lb.

Mix.

The peculiarity of the powder is that, on treating with water, the whole of the alum, practically, is rendered insoluble.

236/40. *A. C. S.*—Cutch.—It is true that the "cutch" mentioned in our market report of January 29 sold at very low figures, but we doubt whether that quality would be suitable for your purposes. Lately, such cutch has been offered at nearly every drysaltery sale. It is usually offered in lots of twenty boxes containing about 1 cwt. each. The better brands of cutch are at present worth from 33s. to 34s. per cwt. in a wholesale way. You might write to S. Lambert & Co., 132 Fenchurch Street, E.C.

242/68. *Bedford.*—White Birch Oil is oleum rusci, the tar distilled in Russia from the bark of the white birch.

243/10. *Verax.*—The Ball-room Powder is as good for the purpose as spermaceti alone, and goes much farther. Foreign spermaceti may be used, as it is just as good for this purpose.

243/4. *Sagittarius.*—The adhesive surface of Court Plaster is made from the following:—

	Parts
Isinglass .. ..	6
Water .. ..	8
Proof spirit .. ..	8

Steep the isinglass in the water for a day, then add the proof spirit, and dissolve by the heat of a water-bath.

241/52. *P. R. C.*—Mice Poison.—Triturate 1 drachm of strychnine (the sulphate of the alkaloid preferably, as it is quicker in action) with 1 drachm of milk of sugar, then add 2 grains of Prussian blue, 2 drachms of white arsenic, and 1 oz. of flour. Mix well.

240/66. *Sponge.*—You cannot do better than consult any courteous drug-traveller in regard to materia medica specimens.

241/28. *Economist.*—We presume that Stanford's processes are carried out by the North British Chemical Company, of which Mr. E. C. C. Stanford is managing director. The company does not have works in England; they are on the Clyde.

239/25. *A. A. B.*—Common ivy (*Hedera helix*) exudes a resinous substance—probably a gum-resin—if the stem be incised. This, no doubt, is the "gum of ivy" mentioned by Walton in his "Compleat Angler." The object of dissolving the "gum" in the oil of spike is to prevent the latter being washed off too quickly when the bait is cast into the water. Gum of ivy is not likely to be obtainable commercially. Any flexible resin would, we should say, do just as well. Oil of rock is probably crude petroleum.

103/36. *Vinum*—Isinglass is, on the whole, better than gelatine for Detannating Wine, as it does not disintegrate, and clarifies the wine thoroughly. Twenty grains to 1 quart is sufficient. Steep it for an hour in water before adding to the wine, and set aside for a few days afterwards.

## Information Supplied.

217/33. *Painter's Terebene Drier* is made by shaking turpentine with sulphuric acid, decanting, then with a milk of chalk and water, and again decanting.

ADELAIDE.

*Quinine and Iron Tonic.*—Why should "Maranta" (237/70) put himself to so much bother and risk of waste material—to say nothing of time taken up by washing precipitate, &c.—in making his quinine and iron tonic, when he has ferri et quin. cit. or a strong solution ready to his hand? Has he any objection to try the following modification:—

Ferri et quin. cit. .. ..	5viij.
Tr. aurantii .. ..	3iss.
Vin. ferri .. ..	3vj.
Liq. strychninae .. ..	5iv.
Syr. simplicis .. ..	3iv.
Aq. chlorof. ad .. ..	348.

Solve et mis.

Then add ferri et am. cit. q.s. to give the desired colour; allow to stand in a stoppered bottle for a few weeks, and filter. This will avoid excess of acids, which hasten the changes he complains of.

ADELAIDE.

## Information Wanted.

[Replies to the following requests are solicited by correspondents of THE CHEMIST AND DRUGGIST.]

146/32. Where to obtain sealed tubes containing oil of peppermint, for use in the apparatus known as a "drain ferret."



20 HIGHEST AWARDS.

# Pears' Soap

Soap Makers

by Appointment to



H.R.H.

The Prince of Wales.

RETAIL PRICES.			Per Dozen.	WHOLESALE PRICES.
	6d.	SIZE, unscented	- - -	4s.
	1s.	„ all shapes, Washing or Shaving		8s.
	1s. 6d.	„ Ditto ditto		12s.
	2s. 6d.	„ (The Washing Tablets are perfumed with Otto of Roses)		20s.
<hr/>				
	TRANSPARENT GLYCERINE	2s. per Box of 3 Tablets	16s.	Per dozen Boxes.

## DISCOUNT of 20 per Cent.

### On all ORDERS of NOT LESS than £5.

(GROSS TRADE-PRICE VALUE.)

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[Lesser Quantities 15 per Cent. Discount only.]



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No Dealer in the Kingdom, "Wholesale or Retail," for any quantity whatever obtains more than the above 20 PER CENT. Discount.

(Signed), *A & F Pears*

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# BICARBONATE OF SODA,

REFINED AND RECRYSTALLIZED.

PURE AND CHEAP:

## ANALYSIS.

Bicarbonate of Soda	...	...	...	...	97.20
Mono Carbonate of Soda	...	...	...	...	1.90
Sulphate of Soda	...	---	---	...	trace
Chloride of Sodium	...	...	...	...	.035
Moisture	...	...	---	...	.82
Insoluble	...	...	...	...	nil

# PURE ALKALI,

GUARANTEED 58 DEGREES,

EQUAL TO 98 PER CENT. OF CARBONATE OF SODA.

Most economical form of Soda for the use of Printers, Bleachers, Dyers; Glass, Paper, and Soap Makers.

# SODA CRYSTALS

OF THE FINEST QUALITY.

# BRUNNER, MOND & CO., LIM.

*Manufacturers of Soda by the Ammonia Process  
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# WYLEYS & CO.

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AND

## DRUG GRINDERS.

WAREHOUSES, LABORATORIES, AND DRUG MILLS,  
**COVENTRY.**

### GELATINE COATED OVAL PILLS.

*For Stock Sorts, Testimonials, &c.,  
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*For Private Formulæ write for  
Estimates.*

### COMPRESSED PELLETS.

#### DISINTEGRATING—SOLUBLE.

We manufacture all varieties, and issue the same in bulk, or put up in metallic boxes or screw-capped bottles, with descriptive labels.

**EXTRACT of Malt.**

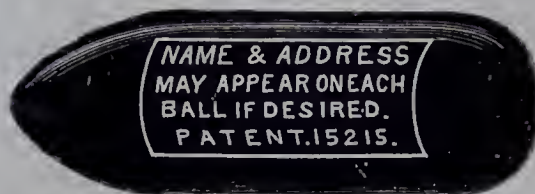
**EXTRACT of Malt and Cod Liver Oil.**

**EXTRACT of Malt, Cod Liver Oil,  
and Hypophosphites.**

In bulk, or in amber bottles in cardboard cases, 12/- per dozen.

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(PATENTED.)



"The obvious superiority of these balls over the old paper-wrapped articles will impress the most stolidly conservative of farmers."—*The Chemist and Druggist*,

No. 4.—Alterative Balls	...	...	24/	per gross.
" 5.—Astringent Balls	...	...	24/	"
" 12.—Condition Balls	...	...	24/	"
" 6.—Cordial Balls	...	...	24/	"
" 7.—Cough Balls	...	...	24/	"
" 16.—Cough Balls	...	...	27/	"
" 17.—Cough Balls	...	...	27/	"
" 8.—Diuretic Balls	...	...	24/	"
" 9.—Fever Balls...	...	...	24/	"
" 1.—Physic Balls	...	...	24/	"
" 2.—Physic Balls	...	...	30/	"
" 3.—Physic Balls	...	...	36/	"
" 18.—Physic Balls	...	...	42/	"
" 19.—Physic Balls	...	...	48/	"
" 15.—Stimulating Balls	...	...	24/	"
" 10.—Tonic Balls...	...	...	24/	"
" 11.—Tonic Balls...	...	...	20/	"
" 13.—Worm Balls	...	...	30/	"
" 14.—Worm Balls	...	...	60/	"

#### PRIVATE FORMULÆ.

WYLEYS & CO. will be glad to prepare Patent Duraplastic Balls from private recipes.



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## GRANULAR EFFERVESCENT PREPARATIONS.

"ALFRED BISHOP" was the Inventor and Original Manufacturer of these Preparations.  
All others are imitations.

SILVER MEDAL, PARIS EXHIBITION, 1889.

HIGHEST AWARD FOR GRANULAR PREPARATIONS.

Citrate of Caffeine	...	1, 3, 5 and 10	grs. in 1 dr.
Citrate of Lithia	...	...	5 do.
Citrate of Potash	...	...	10 do.
Antipyrin	...	...	5 and 10 do.
Lithia Benzoate	...	...	5 do.
Nux Vomica	...	...	$\frac{1}{12}$ do.
Iron Carb. (Formula Bland)	...	...	2 do.
Sodium Bromide	...	...	10 do.

Phenacetin	...	...	5 and 10 grs. in 1 dr.
Caffeine Hydrobromate	...	...	1, 3 and 5 do.
Iron and Arsenic	...	...	4 grs. and 3 mns. in 1 dr.
Exalgine	...	...	1 and 2 grs. in 1 dr.
Lithia Salicylate	...	...	5 do.
Soda Salicylate	...	...	5 and 10 do.
Soda Sulphate	...	...	10 do.

MAGNESIA CITRATE (the Original).

We are now making a Second Quality Citrate of Magnesia at 1s. 3d. per lb. less 10 per cent., sold only in bulk, smallest quantity 4½ lbs. Special Discounts for larger quantities. We guarantee this to be a thoroughly sound and reliable article.

AND ALL OTHER GRANULAR EFFERVESCENT PREPARATIONS.

List free on application.

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36s. and 18s. per dozen.

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No Nausea, Eructations, or Indigestion.



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FOR PURITY,

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Will be pleased to  
fill any lines from their  
large Stock, which the  
Trade may be unable  
to obtain from their  
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with pushing Houses to receive  
Goods on Commission for  
prompt Sale in this Colony.*



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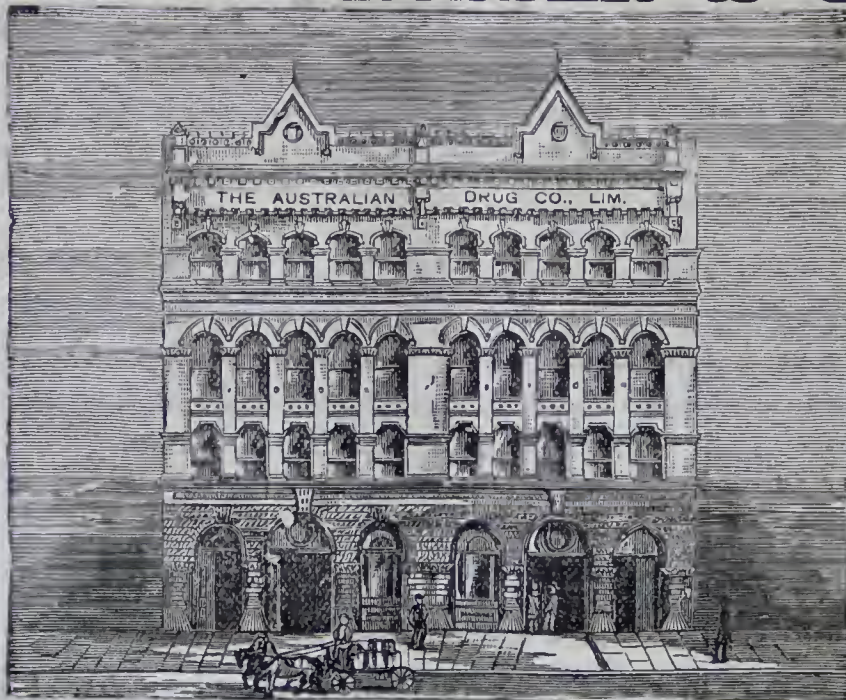


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LUCKNOW, OUDH, INDIA,

Possess exceptional facilities for the introduction of NEW SPECIALITIES Patent Medicines, Druggists' Sundries, Perfumery, &c.

**PURE TARTAR EMETIC.****PURE OXIDE OF ANTIMONY.**

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CONCENTRATED TINCTURES, ETC.**

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So-called Concentrations are in the market, called by the same name as manufactures, that are made by triturating extracts etc., with sugar of milk, powdered root, etc

**WHAT ARE CONCENTRATED TINCTURES?**

They are not made from the crude material, but by dissolving the active principles in Alcohol in definite proportions, and invariably represent a uniform amount of therapeutic power.

Send for printed matter on CON. TINCT. AVENA SATIVA in the Morphia or Opium Habit, and certificates from different members of the Medical Profession, citing cases under their charge, treated by it; also REVISED AND ENLARGED MANUAL; also Price Lists, to

**B. KEITH & CO.,**

75 WILLIAM STREET NEW YORK. U.S.A.

**JULIUS LEVY,**

Wholesale Druggist & Sundryman, 316 Flinders St., Melbourne, & Charlotte Place, Sydney.

**AGENT FOR**

**HEINRICH HAENSEL** — Olea aetherea sine terpeno.

**E. MERCK** — Alkaloids and Glucosides.

**GUSTAV LOHSE** — Lily of the Valley Perfumery and Superior Toilet Soaps.

**ROBERT FRERES** — Triple Extraits and Olive Oil.

**STEVENSON & HOWELL** — Special Belfast Flavour, Gum Foam, &c. &c.

**W. TOOGOOD** — W.-Brand of Dispensing Bottles and Chemists' Sundries.

Correspondence invited and should be addressed to Charlotte Place, Sydney. Special facilities for introducing new lines.

**FUERST BROS., 17 Philpot Lane, LONDON, E.C.**

Supply the Wholesale Trade with Chemicals, Drugs, and Oils direct from Manufacturers personally known to themselves, they can, consequently, vouch for the purity of the articles they sell, viz. :

Castor Oil  
Almond Oil  
Olive Oil  
Cod Liver Oil  
Acetic Acid  
Tartaric Acid  
&c.

Phosphoric Acid  
Salicylic Acid  
Citric Acid  
Camphor  
Glycerine  
Glucose  
&c.

Tartar Emetic  
Castile Soap  
Pepsin, P.B.  
Albumen  
Cantharides  
Herbs and Extracts  
&c.

Insect Powder  
Essence of Lemon  
Neroli  
Floral Waters  
Perfumes  
Otto of Rose  
&c. [2]

Or any other kind or description of OILS, CHEMICALS, DRYSALTERIES, DRUGS, ESSENTIAL OILS.

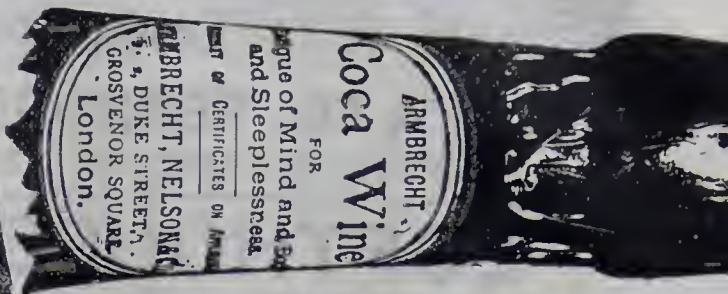
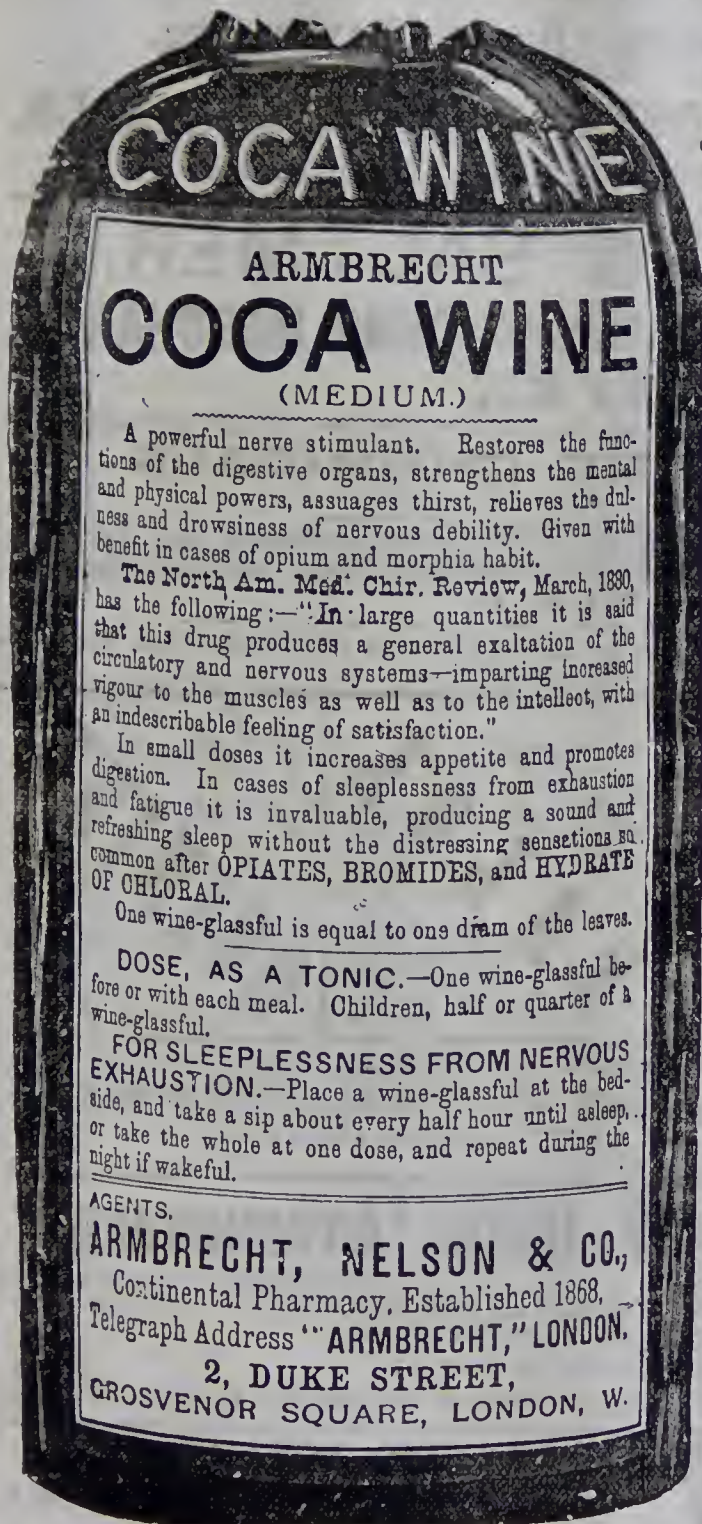
N.B.—ALL CURRENT ARTICLES KEPT IN STOCK. Samples and prices on application.

Telegrams—"FUERST LONDON."

Telephone No. 1050.



# ARMBRECHT COCA WINE.



"Several preparations of Coca Wine have been placed before the public, but we unhesitatingly accord to the above the first place. Their Coca Wine is more suited to the English palate than some of the continental preparations, which are too sweet to be palatable, and which destroy their otherwise tonic and invigorating qualities by deranging the digestive system or creating nausea. The value of Coca Wine in conditions of debility is too well recognised to require comment, and we need do no more than say that after a very careful trial of Messrs. ARMBRECHT, NELSON & Co.'s Wine we can speak most highly of it as a sound and invigorating tonic, and can recommend it most unhesitatingly."—*Journal of Laryngology and Rhinology.*

## COCA WINE EXTRACT.

A SUBSTITUTE FOR COCA WINE,

Or for making Coca Wine by adding five drops (or more) to Wine.

## COCA LOZENGES.

[This Illustration represents the EXACT SIZE of the 4s. 6d. Bottle.]

Very liberal discount and nice Show Cards to the Trade.

Sold by all Wholesale Druggists throughout Great Britain, at 36/- per dozen, or in dozen lots, carriage paid direct, with the usual cash discount.

## ARMBRECHT, NELSON & CO.

2, 3 & 4 DUKE STREET, GROSVENOR SQUARE, LONDON.

See pages 37, 38, 39, 40, 41, 42, 43, 44 in 1891 Diary.



# GRINDING

In all its branches by Patent and Improved Steam Machinery.



**DRUGS, CHEMICALS, FULLER'S EARTH,**  
Seeds, Spices, Roots, Barks, &c.

**JORDAN & CO., BERMONDSEY GRINDING MILLS,**  
WHITE'S GROUNDS, BERMONDSEY, LONDON, S.E.

**LOFTHOUSE & SALTMER,**  
**MANUFACTURING CHEMISTS, WHOLESALE AND EXPORT DRUG MERCHANTS,**  
**HULL,**

Manufacturers of all Pharmaceutical Preparations on the best and most improved principles. Quotations on Application  
**DEALERS IN PURE CHEMICALS**  
For Medicinal, Photographic, and Commercial purposes.

Importers of Cod Liver, Castor, and Olive Oils; Extra Super Essence of Lemon and Bergamot  
Otto de Rose, and all Essential Oils; Valerian Saffron; Vanillas; Fruit Essences; Carmine;  
Aniline Dyes; Bees' Wax, &c., &c.

Special Agents for Sicilian Sublimed Sulphur in 2-cwt. bags, and Rolled Sulphur in 3-cwt. casks. Most Favourable  
Quotations can be given on application.

A  
Purely  
Vegetable  
Digestive Ferment.  
**PAPAIN**  
(DR. FINKLER & CO.)  
Acts in Acid, Alkaline,  
and Neutral  
Solutions.

A  
new and  
most efficient  
Analgesic in cases of  
**EXALGINE**  
(BRIGONNET).  
Facial and Dental Neu-  
ralgia, Sciatica,  
Lumbago,  
&c.

The  
New Anti-  
Rheumatic and  
Antiseptic Remedy  
**SALOL**  
(DURAND, HUGUENIN & CO.)  
For treatment of Rheu-  
matism, Dysentery,  
Ulcers, Skin  
Diseases  
&c.

All  
the more  
important Salts  
of  
**QUININE**  
(MILAN BRAND).  
Cinchonidine, Cincho-  
nine, Quinidine,  
&c., kept in  
stock.

Obtainable through the Wholesale Druggists throughout Great Britain and Ireland, and of  
**B. KÜHN, 36 St. Mary-at-Hill, LONDON,**  
SOLE WHOLESALE AGENT FOR THE UNITED KINGDOM AND EXPORT.  
PAMPHLETS AND PRICES ON APPLICATION.

## AROMATIC TINCTURE OF IRON 'ATHENSTAEDT.'

- |   |   |
|---|---|
| (1) Contains a constant percentage of 0.2 % Metallic Iron.                                    | (3) Stimulates the Appetite and expedites the Digestion |
| (2) Is most agreeable to take, and free from the inky<br>flavour common to other Iron Tonics. | (4) Does not affect Teeth.                              |
|   | (5) Is free from Alkali.                                |

SAMPLES AND PAMPHLETS FROM THE SOLE AGENT:—

**FREDERICK BOEHM, 27 Billiter Square Buildings, LONDON, E.C.** [3]

**INTERNATIONAL FISHERIES EXHIBITION, LONDON, 1883.**

# COD LIVER OIL.

The Only **GOLD MEDAL**  
For British Exhibitors was awarded to  
**T. J. SMITH,**  
10 & 11 NORTH CHURCH SIDE, HULL  
Importer of Norwegian, Newfoundland, & other varieties.  
Low Quotations on application. Delivered at London or Liverpool.



**R. W. GREEFF & CO.**

AGENTS FOR

**SALIPYRIN-RIEDEL** $(C_{11}H_{12}N_2O C_7H_6O_3)$ 

Applied in Therapy where Antipyrin and Salicylic Acid  
are prescribed together, but has *no objectionable after-effects, even if taken in doses of 6 grs. pro die.*

**THIOL-RIEDEL.**  
**SULFONAL-RIEDEL.**  
**PHENACETIN-RIEDEL.**

R. W. GREEFF & CO. are also Manufacturers' Agents for the following Specialities:—

IRON REDUCED BY HYDROGEN.

ACETANILID, PUREST, BEST CRYST.

ACETIC ACID, GLACIAL &amp; P.B.

ACETONE, PURE, 98°.

GLYCERINE, 1,260 d.d., &amp;c.

CASTOR OIL (FRENCH).

MAGNESIA, CARB. AND CALC.

SODA HYPOSULPHITE.

SUGAR OF MILK.

ANILINE COLOURS (CELEBRATED  
BERLIN BRANDS).

SOLE WHOLESALE AGENTS:

**R. W. GREEFF & CO.,** 29 Mincing Lane, **LONDON, E.C.**

**NEPENTHE.****THE SAFEST AND BEST PREPARATION OF OPIUM.**

PRODUCES NEITHER HEADACHE, SICKNESS, NOR CONSTIPATION.

PREPARED EXCLUSIVELY FROM OPIUM.

Although many new hypnotics and analgesics have been recently introduced, NEPENTHE still holds its position as THE hypnotic and sedative *par excellence*. "Nepenthe" is registered under the Trade Marks Act, and is our sole property. No other preparation should be substituted when Nepenthe is ordered in a prescription.

Sent out in bottles bearing a label in white letters upon a green ground. We prepare also *Double Strength Nepenthe*, and *Glycerole of Nepenthe* (eight times the single strength) for hypodermic injection.

PRICES AND TERMS ON APPLICATION.

**FERRIS & CO.,** WHOLESALE AND EXPORT DRUGGISTS **BRISTOL.**



# BARRON, HARVEYS & CO.

GILTSPUR STREET, LONDON, E.C.

Beg to inform their friends and the Trade generally that, having purchased the Business of

**BARRON, SQUIRE & CO., BUSH LANE,**

and also the various Formulæ of the Special Preparations of

**JAMES BASS & SONS, HATTON GARDEN,**

they are prepared to execute orders for the same, and pledge themselves to supply them in all their integrity.

*Specimens of these Preparations have remained in the Museum of Kew Gardens during 23 years without deterioration.*

ESTABLISHED 1813.

## CLAY, DOD & COMPANY,

WHOLESALE AND EXPORT DRUGGISTS,

52 ST. ANNE STREET, LIVERPOOL.

Address for Telegrams—"CLAY LIVERPOOL."

Telephone No. 1192.

Mills and Laboratories—WAKEFIELD STREET.

IMPORTERS OF ESSENTIAL OILS, OLIVE OILS, CASTOR OIL.  
FINEST NORWEGIAN COD LIVER OIL.

Manufacturers of all descriptions of

PHARMACEUTICAL PREPARATIONS, COATED TASTELESS PILLS.

*Powders ground in own mills. Purity guaranteed.*

*Samples free on application. Special Quotation to Cash or Large Buyers. Monthly Priced List forwarded on receipt of business card*

BITUMINOL, OR VASELINE SUBSTITUTE.

## W. EDWARDS & SON,

157 QUEEN VICTORIA STREET, LONDON,

WHOLESALE AND EXPORT DEALERS IN

Patent Medicines and Proprietary Articles,

ENGLISH, AMERICAN, FRENCH, &c.

SOLE AGENTS for ROCHE'S HERBAL EMBROCATION,

Burchell's Anodyne Necklaces, Ford's Balsam of Horehound, Widow Welch's Pills, by Mrs. Smithers  
Oxley's Essence Ginger, and the preparations of Messrs. Hudson & Son, late of the Haymarket, London.

PRICE LISTS SENT ON APPLICATION. ORDERS CAREFULLY AND PROMPTLY EXECUTED.





A GOOD LINE IN DYES  
WILL ALWAYS  
COMMAND A SALE.

DO NOT DELAY! WRITE AT ONCE!!  
And secure a most attractive and saleable Spécialité for  
DISPLAY and WINDOW DRESSING.

## SAUNDERS' BRILLIANT DYES FOR EASTER EGGS.

### LIST OF PRICES.

1d. packets, 7/ per gross.  
Display Card containing 15 doz.  
assorted, for 10/6.

### COLOURS OF DYES.

BLACK	CHARTREUSE
BROWN—	CLARET
LIGHT	CORAL
DARK	CREAM
GOLDEN	CERISE
BLUE—	CRIMSON
LIGHT	CRUSHED
DARK	STRAWBERRY
NAVY	FAWN
ELECTRIC	GOLDEN
BRONZE	YELLOW
BUTTERCUP	GREEN
CANARY	GREY
CARDINAL	



### LIST OF PRICES.

3d. packets, 21/ per gross.  
Display Card, containing 6 doz.  
assorted, for 10/6.

### COLOURS OF DYES.

LAVENDER	PURPLE
LILAO	ROSE
MAGENTA	RUBY
MAUVE	SALMON
MARONE	SOARLET
MOSS	SLATE
ORANGE	STRAW
PEACH	SULTAN RED
PINK	TABAO
PLUM	TERRA COTTA
PONCEAU	TUSCAN
POPPY	VIOLET
PUCE	YELLOW

Specimen of Display Card worked up in brilliant colours—the Dyes attached—the whole in a handsome Gilt Frame.

**THERE IS NOTHING LIKE IT IN THE TRADE.**

A Sample Card of 1d. or 3d., containing the most saleable colours, sent carriage paid on receipt of Postal Order to the value of 10s. 6d. Money returned if the Goods are not approved of.

## ANILINE DYES IN PACKETS.

SPECIALY PREPARED FOR CHEMISTS' TRADE.

EVERY COLOUR GUARANTEED—BEING THOROUGHLY TESTED BEFORE BEING SENT OUT

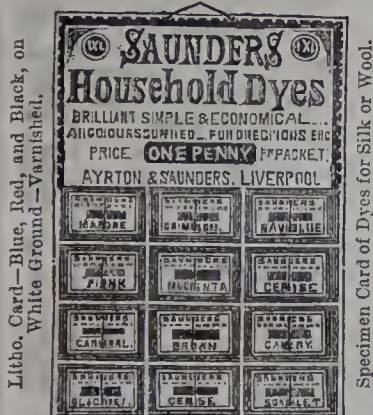


Illustration of our Desk-shape Mahogany Counter  
Stock-case, with Coloured Tablet in front and Drawer  
at back—price 54/ set, stocked with Dyes, any colour,  
equal to 4 gross 1d. and 1 gross 3d. size.



We are prepared to give Special Quotations (for quantities of 10 gross and upwards) for packed dyes with Customer's own Name and Address on.

### PRICE LIST OF ANILINE DYES IN BULK.

ALL COLOURS WARRANTED TO BE EQUAL IN EVERY RESPECT TO WHAT WE PACK.

Please Compare the Prices. 1/2-lb. Sample Tins sent per post. Packed in 1/2-lb., 1-lb., and 1-lb. Decorated Metal Stock Boxes.

Black	.....per lb.	9/	*Cardinal	.....per lb.	6/	Grey	.....per lb.	10/	Puce	.....per lb.	9/
Brown	.....	5/6	Claret	.....	6/6	Lavender	.....	13/	Purple	.....	9/6
" (Bismarck)	.....	7/	" Opt.	.....	8/	Magenta	.....	8/	Rose	.....	7/
" (Light)	.....	4/6	Cream	.....	9/	Mauve	.....	9/	Ruby	.....	7/6
" (Dark)	.....	6/	Crushed Straw	.....	7/	Marone	.....	3/3	Salmon	.....	8/
" (Golden)	.....	7/	berry	.....	8/	" Opt.	.....	6/6	Scarlet, No. 1	.....	4/6
Blue	.....	12/	*Cerise	.....	6/	Orange	.....	10/	* No. 2	.....	9/
" (Light)	.....	10/	Crimson	.....	7/	Peach	.....	7/6	Slate	.....	10/
" (Dark)	.....	9/	Golden Yellow	.....	10/	Pink	.....	6/	Sultan Red	.....	7/6
" (Navy)	.....	9/	Green	.....	6/	Plum	.....	8/	Terra Cotta	.....	9/
" (Electric)	.....	15/	" in Crystals	.....	18/	" Opt.	.....	6/	Violet	.....	9/
Canary	.....	7/	Olive	.....	7/6	*Ponceau	.....	6/	Yellow	.....	7/6

If the above are supplied in round Tins, an allowance of 6d. per pound is made.

All the colours marked \* are special preparations of our own, and will be found very superior, both for brilliancy of colour and economy in use.

SOLD BY CHEMISTS AND DRUGGISTS ONLY; WHOLESALE FROM

**AYRTON & SAUNDERS, Dye Merchants, 149 Duke St., LIVERPOOL.**

Agents—W. EDWARDS & SON, 157 Queen Victoria Street, E.C.





# "AGREED AT LAST."

THE Statuette, as drawing below, is effectively produced in Terra Cotta, the likenesses of the two great political leaders being most striking, and their expression clearly shows they have at last found a topic on which no difference of opinion can exist, viz., that **"HOCKIN'S ACME CONES ARE THE BEST."**

We present this striking group, which is 18 inches high, with all first orders for £2 10s. worth of our

## "ACME" BRAND PURE MENTHOL CONES

(not more than £1 in value to be taken in 1d., 2d., and 3d. Cones.)

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NEW PATTERNS,  
SPECIALLY  
SALEABLE.

- No.  
\*217F. Glass Show Bottle.  
with foot, as fig. 88, 1/3  
per doz.  
\*217A. Glass Show Bottle.  
with foot, as fig. 161, 3/-  
per doz.  
\*214A. Glass Show Bottle.  
with foot, as fig. 161. This  
has a very large Cone. 4/3  
per doz.  
220. Cone Shape, as fig. 203.  
each in slide box, 1 doz. in  
Outer, extra size, 4/3 per  
doz.  
\*221. Large Flat Draughts-  
man, very large Cone (120  
grains), 4/9 per doz.  
222. Elegantly cut Show  
Glass Bottles, as fig. 222,  
3 cuttings, 9/- per doz.  
224. Enamelled Tin Box,  
Printing on box, 30 gr.  
Cone, 1/6 per doz.

\* These are packed in 1-doz.  
Hanging Glass-fronted Boxes.



AGREED AT LAST.  
HOCKIN'S "ACME" BRAND  
PURE  
MENTHOL

Cures Neuralgia, Headache, Tic doreux, etc. by external application only

### 1d. CONES.

No.

219. Willow Boxes, bottle,  
barrel, or acorn shape,  
3 doz. on card, one sort  
or assorted, 6/- gross.

### 2d. CONES.

- 202s. Polished Willow Boxes,  
bullet shape, 2 doz. on card,  
12/- gross.  
201s. Polished Willow Boxes,  
barrel shape, 2 doz. on card,  
12/- gross.  
206s. Polished Willow Boxes,  
cone shape, 2 doz. on card,  
12/- gross.

### 3d. CONES.

- 207s. Polished Willow Boxes,  
Draughtsman shape, 18/-  
gross.

### 4d. CONES.

- 83G. Polished Soft Wood,  
pedestal shape box, 80  
grain cones, 1 doz. on  
card, 2/9 doz.

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We only quote the most saleable patterns here. Detail of all shapes on application

For Buyers who find 50/- worth too much, we shall be glad to send with an order for 25/- an **OPAL GAS GLOBE**, lettered as an Advertisement for Menthol, which makes a most striking and attractive addition to a Pharmacy.

## HOCKIN, WILSON & CO.

13 to 16 NEW INN YARD, 186a TOTTENHAM COURT ROAD, LONDON, W.

CATALOGUE OF SUNDRIES AND SPECIALITIES FORWARDED ON RECEIPT OF BUSINESS CARD.



# THE CARBOLIC SMOKE BALL

WILL POSITIVELY CURE.

**COLDS**  
**CURED**

**COLDS**  
**CURED**

**COLDS**  
**CURED**

**COLDS**  
**CURED**

For Inhalation only.



For Inhalation only.

*As all the Diseases mentioned herein proceed from one cause, they can, therefore, be cured by one remedy—namely, the CARBOLIC SMOKE BALL.*

The **Carbolic Smoke Ball** will not only cure all diseases caused by taking cold, but will, if used in time, positively ward off colds.

One **Carbolic Smoke Ball** will last a family several months, making it the cheapest remedy in the world at the price—10/-, post free.

The **Carbolic Smoke Ball** can be refilled, when empty, at a cost of 5/-, post free.

**COLD**  
**IN THE HEAD**  
Cured in twelve hours.

**COLD**  
**ON THE CHEST**  
Cured in twelve hours.

**CATARRH**  
Cured in three months.

**ASTHMA**  
Cured in every case;  
relieved in ten minutes.

**BRONCHITIS**  
Cured in every case.

**HOARSENESS**  
Cured in twelve hours.

**LOSS OF VOICE**  
Fully restored.

**INFLUENZA**  
Cured in two days.

**HAY FEVER**  
A cure guaranteed.

**THROAT**  
**DEAFNESS**  
Cured in three months.

**SORE THROAT**  
Cured in twelve hours.

**SNORING**  
Cured by inhaling at  
bedtime.

**CROUP**  
Relieved in five minutes.

**WHOOPI**  
**COUGH**  
Relieved the first appli-  
cation.

**NEURALGIA**  
Cured in ten minutes.

**HEADACHE**  
Cured in ten minutes.

**BEWARE OF  
WORTHLESS AND FRAUDULENT IMITATIONS.**

Retail Price, 10/- each. Chemists can obtain from all the Patent Medicine Warehousemen.

WHOLESALE AND SHIPPING FROM—

**WILCOX & CO., 239 OXFORD STREET, LONDON.**



# R. H. BARRETT'S NEW PATENT BOTTLE.

THE ONLY REALLY PERFECT CAPPED BOTTLE FOR VASELINE, POMADE, DRY POWDERS, &c.

**PRICES** (in 5-gross Lots):—Fitted with STRONG METAL CAPS, CORK-LINED, in various colours, very attractive in appearance—1 oz., 12/6; 1½ oz., 13/6; 2 oz., 14/6; 3 oz., 16/; 4 oz., 18/ per gross.

Fitted with best BOXWOOD CAPS—1 oz., 15/6; 1½ oz., 16/6; 2 oz., 17/6; 3 oz., 21/6; 4 oz., 24/6 per gross.

*Chemists' and Perfumers' Bottles in great variety, Plain or Stoppered. Orders may be sent to the*  
PRINCIPAL WHOLESALE HOUSES.

**R. H. BARRETT,**  
FLINT GLASS BOTTLE WORKS,  
THE OVAL, CAMBRIDGE HEATH, LONDON, E.  
Telegraphic Address—"FOREFRONT LONDON." [2]



# BOXES

AUSTIN & CO., 8 GREVILLE ST., HATTON GARDEN, LONDON, E.C.

Steam Works, 2 Printer's Buildings, Broad Yard, Turnmill Street, London,  
and Ring Factory, Clonakilty, County Cork.

## CHALMERS' PATENT SAMPLE AND PARCELS POST BOX. THE ONLY BOX

That fulfils ALL the requirements of the POST OFFICE.



Is fastened INSTANTLY.

Cannot open by accident.

Is immensely strong.

Has no corners.

No seams, joints, nor solder.

Nothing to scratch or tear letters.

Is practically air-tight:—Is used  
for Flour, Cherry Blossom,  
Sanitas, and Soap-Powders.

Dispenses with string, bags, and  
paper.

Saves 19 minutes out of 20.

**OVER 300,000 SOLD.**

SAVING THEIR OWN COST.

**W. B. CHALMERS,** 37 MINCEING LANE  
E.C.



# KILNER BROTHERS

## MANUFACTURERS

OF

## GLASS BOTTLES

ALL SHAPES, SIZES, AND COLOURS,

FOR

## DISPENSING

In Green and White Flint. All the required sizes in Flat, Oval, Round, Octagon, and Direct Square. The "K" Brand is well known, and is in constant and increasing demand.

## FEEDING.

### "OUR BABIES' BOTTLE."

Fitted in a large variety of styles to suit all classes of buyers  
Careful attention given to quality of Bottles and Rubber.  
Increasing sales testify to the satisfaction given by these Feeders.

## MINERAL WATERS.

Codd's, Bulbs, and all the best Stoppered kinds; full size and splits.

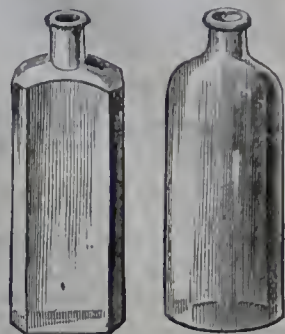
Also CORK BOTTLES to suit all tastes.

## VAN BOXES and CASES

To contain above and many other kinds of Bottles.

BUYERS ARE CORDIALLY INVITED TO CORRESPOND.

*Samples, Price Lists, and Special Quotations for large quantities sent on application.*



— No. 3<sup>A</sup> GREAT NORTHERN GOODS STATION, KING'S CROSS, LONDON. —

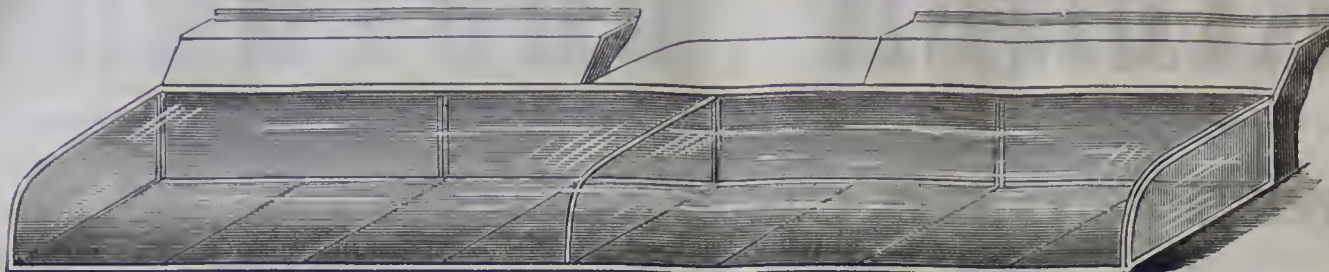


# ELKANAH NATALI

(Established 20 Years),

## SHOW CASE MAKER & SHOP FITTER

MAKE MY OWN, AND WORK GUARANTEED. HUNDREDS OF TESTIMONIALS AND REFERENCES.



207 Old Street (Shoreditch End), LONDON. Workshops—Henson Street, E.C. (Only Addresses.)  
No connection with any other house of the same name. Please address in full.

### "THE CHEMIST" DISPENSING COUNTER.

6 feet long by 2 feet wide .. £24  
If the Dispensing Screen only, £12

This handsome Dispensing Counter is manufactured in Spanish mahogany, and of the best workmanship, so that it will stand any climate. The counter has a solid mahogany top, and plate-glass case front. The centre part fitted to take sponge. A mahogany screen on top, consisting of two plate-glass cases, with shelves inside, and large plate-glass mirror in the centre, and three glass tablets with gold writing in ornamental mahogany carved work. The back of screen fitted with small shelves and a glass poison cupboard. The inside of counter fitted with strong counter drawers, label and cork drawer, open shelves, &c.



#### NOTICE TO THE TRADE.

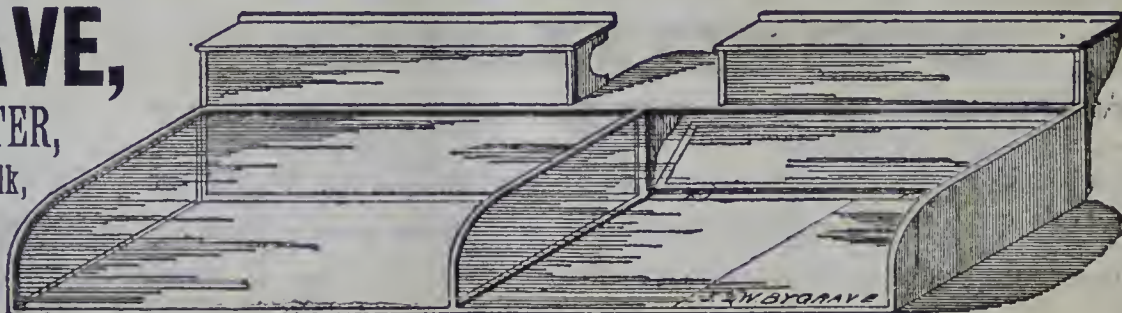
In consequence of inferior Second hand Goods being sold for our make, we have found it necessary to protect our reputation for best work with a Trade Mark, as above, and unless goods are so stamped we cannot be answerable.

### BOWLING & GOVIER

Manufacturers of High-class Shop Fittings,  
GUN ST., BRUSHFIELD ST.  
BISHOPSGATE, E.C.

### BYGRAVE,

SHOP FITTER,  
111 Shepherdess Walk,  
CITY ROAD,  
LONDON, N.



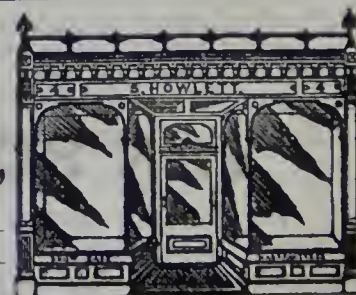
Bent-top plate-glass Counter Showcase, in French polished mahogany, or ebonized, with two upright mirror plate-glass fronted shelves, and table in centre for serving over, and mahogany falls at back lined with mirror plate glass, inside fitted with crimson velvet trays—if 5 ft. long, 18 in. wide, 8 in. high (total height 13 in.), £5 10s.; 5 per cent. off for cash.

ESTABLISHED 1830.

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MEDICAL AND  
GENERAL SHOP FITTER,  
Shop-Front Builder and Show-Case Maker.

EXPORT ORDERS CAREFULLY PACKED AND SHIPPED.



SHOPS FITTED by Contract, in Town or Country, with every requisite, on the most improved principles, and at lowest prices.

NUMEROUS REFERENCES may be obtained of Leading Chemists in all parts of the Kingdom.



A LARGE STOCK of New and Second-hand Fittings and Cases to be sold very CHEAP.  
CABINET FITTER to the Pharmaceutical Society of Great Britain.  
PLANS and ESTIMATES SUPPLIED.

Manufactory and Showrooms—4 Lindley St., Sidney St., Mile End Road, LONDON, E.

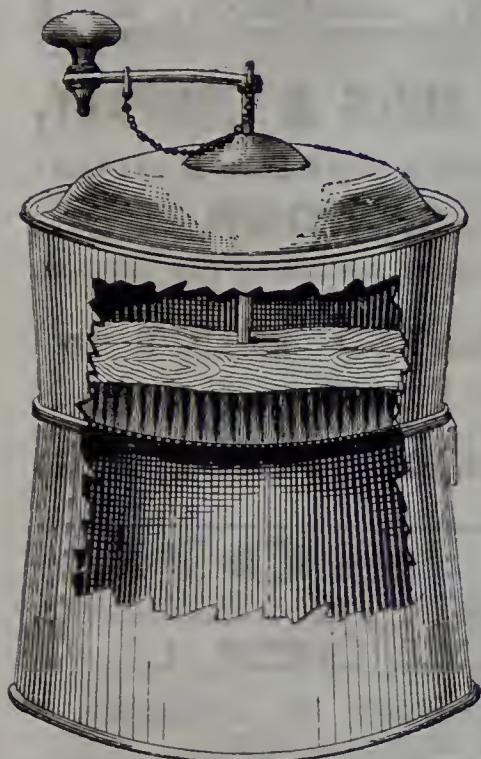


# WILLIAM TOOGOOD'S

## WAREHOUSE AND SHOW ROOM,

### BURLINGTON BUILDINGS,

### HEDDON STREET, REGENT STREET, LONDON, W.



### TOOGOOD'S BRUSH MIXING MACHINE.

To mix 3 lbs. Powder ... .. 12/- each.  
To mix 1 lb. „ ... .. 8/- each.

All stock Machines are fitted with Sieves 60-mesh, but any other sizes can be supplied at same price.

### CROSSE'S SAFETY ENEMA PAN.

REGISTERED No. 138,518.



#### PRICES:

In White Earthenware ... .. 4/- each.  
In Stoneware ... .. 2/3 each.

# THE LACTOTHERME

(Registered Trade Mark), Patented; or,

## INFANT'S PORTABLE FOOD STOVE.

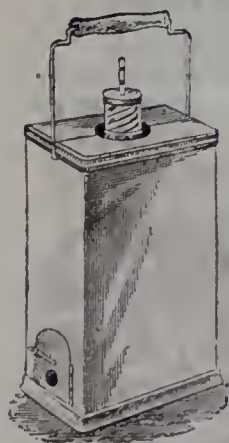
THE BEST MEANS OF HEATING CHILDREN'S MILK.

MAINTAINS A TEMPERATURE OF 98° F. SIX TO SEVEN HOURS.

DOES NOT CAUSE THE MILK TO TURN SOUR.

DESCRIPTIVE PAMPHLET POST FREE.

Prices: 6/-, 8/6, 10/- each.



Colonial and Foreign Enquiries and Correspondence solicited.



**S.V.R., B.P.**

We wish to draw the attention of Chemists to the excellence of the spirit we supply for pharmaceutical purposes. We have devoted great care and attention to this branch and have made it a leading line.

That our efforts in this direction have been appreciated is proved by the number of unsolicited testimonials we have received from nearly every town in the country, of which the following is a specimen:—

GENTLEMEN.—

Please send 5 gall. 56 o.p. as before. I have pleasure in saying I have always found your spirit answer all tests, which is more than I can say of all I have had from different places, and also to be practically free from odour.

Messrs. Stephen Smith & Co.

Yours faithfully, JOSH. N. CUTTS, B.Sc., F.C.S.

In consequence of the increase in the spirit duty our prices will be—

S.V.R. 56 o.p. ... .. 19s. 5d.

Double Distilled, 56 o.p. ... .. 19s. 9d.

CASH WITH ORDER.

REDUCTIONS FOR QUANTITIES.

**SPECIALITY FOR PERFUMERY.**

This pure grain spirit, which has been thrice rectified and filtered through charcoal, is being largely used in making high-class Perfumes.

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**STEPHEN SMITH & CO., BOW, LONDON, E.**

**S. V. METH.****JONES & COMPANY,**

COPPERFIELD ROAD

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LARGEST MAKERS IN THE KINGDOM.

We are prepared to supply METHYLATED SPIRIT in  
5-gallon quantities at Lowest Prices.

**REDUCTIONS TO LARGE BUYERS.**  
SAMPLES FREE.

**BOORD & SON,**

DISTILLERS, FOREIGN WINE AND SPIRIT MERCHANTS, AND METHYLATORS,  
ALLHALLOWS' LANE, & BARTHOLOMEW CLOSE, LONDON, E.C.

Quotations for S.V.R. Methylated Spirit and Finish on application.  
FINEST ORANGE WINE FOR QUININE.

**JAMES BURROUGH, S.V.R.**

CALE ST., CHELSEA, S.W.

and Methylated Spirit

AT LOWEST PRICES.

WRITE FOR QUOTATIONS.

**UNRIVALLED !!!**

New Method for

**BOXMAKING** (Round & Square)

IN

CARDBOARD, PULP, &c.  
PATENTED 1891.

The Machines can be seen at work at  
**T. REMUS**  
Tabernacle St. & Castle St., LONDON, E.C.

FULL PARTICULARS ON APPLICATION.

**G. B. KENT & SONS**

Have been awarded the ONLY



A.D. 1777.

GOLD MEDAL



At the Paris Exhibition, 1889, for  
**ENGLISH BRUSHES**

See pages 169-172 WINTER ISSUE, January 31st, 1891.



# PETROLEUM JELLY,

PARAFFINUM MOLLE B.P.

(PIONEER BRAND) Registered Trade Mark.

Equal to and Cheaper than **VASELINE**.

FOR MEDICAL AND PHARMACEUTICAL PURPOSES.

White, Yellow, Veterinary, and Waterproof. All kinds put up in 1-lb., 5-lb., 7-lb., 14-lb., 28-lb., and 56-lb. Patent Tins, and in 300-lb. Barrels.

# CARBOLIZED PEAT,

THE NEW AND POPULAR DISINFECTING POWDER.

SEND FOR SAMPLES AND PRICES TO THE MANUFACTURERS—

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(ESTABLISHED 1868).

# BEE SWAX.

**W. H. B. PURE REFINED.**

In 2-lb. cakes, in cases of about 130 lbs.

" 1 "	" "	" "	130 "
" 3/4 "	" "	" "	110 "
" 1/2 "	" "	" "	110 "
" oz. cakes in 2-lb. parcels	in cases of 54 lbs.		

**W. H. B. PURE WHITE.**

In round cakes in 2-lb. parcels, or in oblong cakes, loose } In cases of 54 lbs.  
In oz. cakes in 2-lb. parcels } and 56 lbs.  
Plain blocks of 7 1/2 lbs. in cases of 250 lbs.

**WHITE WAX.**

Plain round cakes in 2-lb. parcels in cases of 72 lbs.

The purity of these goods is certified by the following eminent chemists: S. P. Sharpless, State Assayer, Boston; J. W. Taylor, Associate of the Society of Public Analysts of Eng., Montreal, P. Q.; Edward Davies, F.C.S. and T. I. C. and O., Royal Institution, LIVERPOOL, Eng.; Bernard Dyer, D.Sc., F.C.S., F.I.C., Member of the Society of Public Analysts, 17 Great Tower Street, LONDON, E.C., Eng.; Wm. T. Wenzel, Analyst and Assayer, San Francisco, Cal., and may be obtained of any of the leading Wholesale Druggists in the Northern and Midland Counties.

We will deliver our goods in 5-cwt. lots ex quay, in any city which is the Terminus of a Steamship Line throughout the Kingdom, without trouble or expense to the Buyer.

Our Goods may be obtained in single Case lots from any of the leading Wholesale Druggists in the Northern and Midland Counties, and of

**W. H. BOWDLEAR & CO., BOSTON, MASS., U.S.A.**

Cable Address: Office and Warehouse—36 CENTRAL WHARF. Bowdlear, Boston.

# CARBOLIC ACID.

Liquid, Crude and Refined, Crystals (Detached and Glacial, B.P.).

**SPECIALITY.**—Our Refined Liquid Carb. Acid is a bright pale colour, guaranteed 97 per cent. to 99 per cent., and free from all impurities, such as Sulphuretted Hydrogen, &c.

**CONTRACTS FOR 1891.**—We shall be pleased to submit very lowest prices for delivery during 1891 to large Buyers. State approximate quantities required.

**CARBOLIC POWDERS.**—5 per cent. to 20 per cent., from £6 per ton. Pink, White, or Grey Colours. Pink ditto, in large black and gold tin boxes, 1/- sizes, 4/6 per dozen; 1/6 sizes, 6/- per dozen.

**CREOSOL OR SANITARY FLUID.**—Half usual prices. Samples and quotations on application.

**BUY FROM THE MAKERS—THE CHEAPEST HOUSE IN THE TRADE.**

**HAMILTON & CO., LTD., The Sovereign Chemical Works, WANDSWORTH, LONDON, S.W.**



**WALKER, TROKE & CO.**WHOLESALE AND EXPORT DRUGGISTS,  
**82 CITY ROAD, LONDON, E.C.**

SOLE MAKERS OF

**GABRIEL & TROKE'S  
GELATINE  
CAPSULED  
HORSEBALLS.**

ELEGANT IN APPEARANCE.

EASY IN ADMINISTRATION.

EFFICIENT IN ACTION.

Alterative, Condition, Cordial, Cough, Diuretic, Fever, Physic, and Worm Balls.

QUOTATIONS &amp; SAMPLES FREE ON APPLICATION.

**WILEY'S CHEMICAL ESSENCE**  
FOR  
**LAMENESS IN HORSES.**Agents Wanted in every Town. Handbills, with Name and Address, supplied gratis  
**50 YEARS' UNBROKEN SUCCESS.****SOLE MAKER & PROPRIETOR, J. ROOKLEDGE, CHEMIST, EASINGWOLD, YORK.**

TO BE HAD OF USUAL WHOLESALE HOUSES.

**DISPENSING BOTTLES & PHIALS.**We beg to call attention to the following GREATLY  
REDUCED PRICES:—CLEAR BLUE TINTED—Plain or Graduated—  
3 and 4 ounce ... 7/6 per gross.  
6 and 8 „ ... 8/6 „All other kinds and sizes equally low. Please write for prices  
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GLASS BOTTLE MANUFACTURERS.

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BANKERS: LONDON AND WESTMINSTER BANK.

ESTABLISHED UPWARDS OF 50 YEARS

**GARDNER'S**

PATENT COMBINED

**'RAPID' SIFTER & MIXER**STANDARD  
PATTERN.Reduces lumpy powders,  
sifts and mixes faster  
and makes a more perfect  
blend than any Machine  
in the Market.

Send for full particulars to

**WM. GARDNER,  
ENGINEER, & Co.,  
GLOUCESTER.**

FOR HAND OR POWER. Capacities from 15 to 300 lbs. at one mixing.

**DESTRUCTION OF RATS,  
&c.****STEINER'S  
VERMIN PASTE**

REGISTERED.

Is used in  
Australia,  
New Zealand,  
West Indies,  
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etc., etc.

Is a Sure and Certain Destroyer of

**RATS, COCKROACHES, MICE, AND BLACKBEETLES.****IT NEVER FAILS!!!**

The great strength of Steiner's Paste is not impaired in hot climates.

Sold in 3d., 6d., and 1s. Glass Jars, and 2s. 6d. Tins.

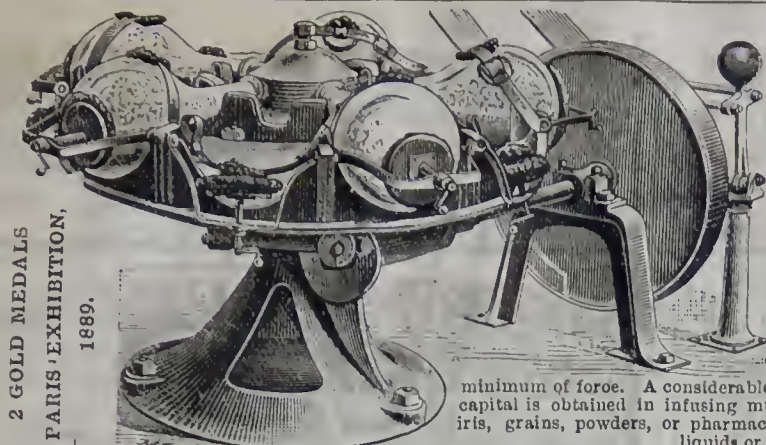
Wholesale and Export at the

**WORKS, HENRY ST., LIMEHOUSE, LONDON.**

ASK YOUR CHEMIST FOR IT.

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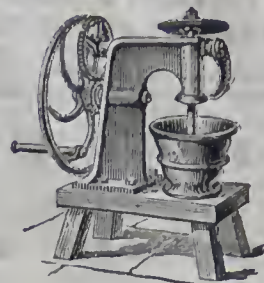


2 GOLD MEDALS  
PARIS EXHIBITION,  
1889.

## BEYER FRERES, 16 & 18 RUE DE LORRAINE, PARIS.

### NEW AGITATING MACHINE

For macerating and exhausting raw materials in infusion with alcohol, producing 150,000 movements per day in each metal receptacle, with a minimum of force. A considerable economy of time, labour, and capital is obtained in infusing musk, amber, benjamin, civette, iris, grains, powders, or pharmaceutical products treated with liquids or ether.



MORTAR MILL, HAND POWER

These machines are made for 10, or 15 bottles, each containing about 15 litres, as required.

MAKERS OF ALL KINDS OF

## MACHINERY for the MANUFACTURE of PHARMACEUTICAL PREPARATIONS.

**N. PALAU & CO., 43 Avenue du Maine, PARIS.**

Special Mills or Laboratories, Mortar-mills, Sifting-machines, and Grinding-machines. Pill-making Machines, Silvering-machines, Coating-machines, Pill-printing Machines, Sugar-coating Pans. Machines for preparing and for cutting Pill-masses. Machines for manufacturing Lozenges. Machines for making Pearls and Gelatinous Capsules. Laboratory Presses, Mixing-machines, &c.

### PILL COATING & PRINTING.

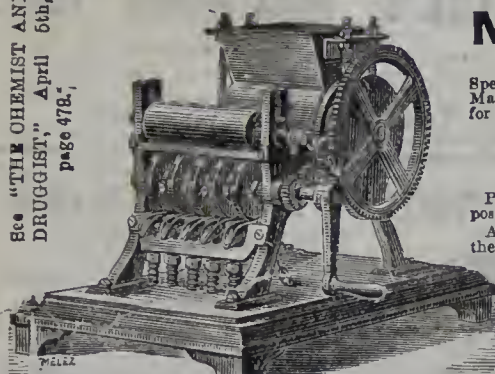
Pill-printing has long been considered a luxury, and remained in the hands of a Paris house, which alone possessed a proper coating process.

As a matter of fact, the coating was the unique difficulty to the extension of the process. This no longer is the case, and we are in a position to offer our clients communication of a means of coating pills. This coating serves as a protection to the substances composing the pills; also, it is absolutely soluble in the gastric juices, and a clear impression is obtained by printing.

The coating effectually protects the pills from alteration from whatever cause, in any climate or temperature. It is less costly than silver or sugar coating.

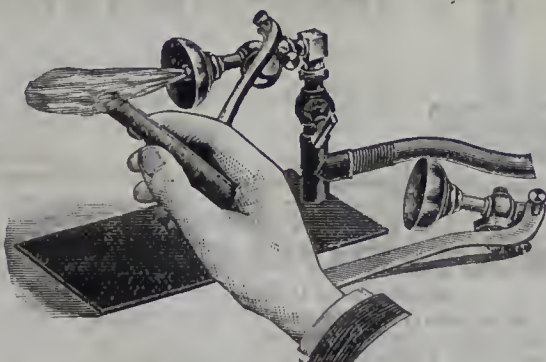
Thus, by our means, pill and granule printing has become quite practicable. It gives a superior appearance to the goods, besides which the printed inscription has the advantage of advertising the manufacturer's name, or of indicating the nature of the active principle.

See "THE CHEMIST AND DRUGGIST," April 5th, page 472.



## HAWES' PATENT SELF-ACTING SEALING JET

Adapted by The Apothecaries Hall and leading Chemists, Stationers, and Confectioners. Great saving in Gas and Labour.



QUITE NEW.

**SINCLAIR, TWEEDIE & CO., 13 ELDON STREET, LONDON, E.C.**

GOLD MEDAL AWARDED, EDINBURGH INTERNATIONAL EXHIBITION, 1890  
No BATH ROOM or CARRIAGE is fully Equipped without

## RANKIN'S CORK MATS

Warm, Soft, and Dry, Easily Washed, Clean, and Durable.

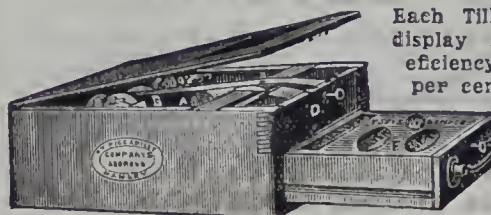
They Prevent Chills in Bathing, and keep the feet warm and comfortable. Mr. GLADSTONE pronounces them to be very useful, and Lord SALISBURY and many of the Nobility and Gentry now use and appreciate them. They prevent cold feet in Driving, in Church, in the Counting-house, in Stone-floored Apartments. Numerous testimonials to their usefulness in a great variety of ways. Size: 1 ft. square to 20x45 in. Prices: 3/1, 5/1, 7/6, and 10/6 each. Special Mats up to 21/ each. Of all leading Chemists and Furnishing Houses.

CAUTION.—Each Genuine Mat branded "Rankin's Cork Mat."  
Wholesale terms on application to

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## STOKES' PATENT CHECK TILL SYSTEM.

A SOUND INVESTMENT.



Each Till has only to display 2d. per week efficiency to return 15 per cent. on outlay.

**30,000**

Sales Checked for

**3 SHILLINGS:**

Terms and full particulars on application.

**G. R. STOKES & CO., Limited, Hanley, STAFF.**



Wholesale Chemists' Agents: **S. MAW, SON & THOMPSON.**



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(NEXT TO SOMERSET HOUSE).

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REPRESENT GERMAN MANUFACTURERS OF

**ANEROID BAROMETERS**

AND

**THERMOMETERS.****HAND-PICKED GUM ARABIC.**Wholesale and Export Druggists before buying elsewhere  
should apply to**FREDK. FINK & CO.**

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**EMP. ADHÆSIVUM OPT.**

18 INCHES WIDE.

On Glazed Calico, 2/9; on Shirting, 4/3 per doz. net cash.

**JOHN QUILLIAM & CO.,** Plaster Works, Manchester.  
Cowburn Street, [3]**S. SAINSBURY'S**From English Lavender  
Flowers, and most choice  
and delicate scents.**Lavender**

176 &amp; 177 STRAND, LONDON.

Established 1899.

Wholesale and Shipping terms on application.

**Water.****HYDE, NASH & CO.**

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SPECIALITIES—

Arabic and Varnish Gums, Glucose, Glycerine, Beeswax,  
Honey, Rhubarb, Insect Powder, Saffron, &c., &c.Country orders for original packages included in public sale purchases at fractional  
margins.**EXCELSIOR POULTRY PILLS,**

FOR POULTRY, PIGEONS, AND ALL KINDS OF CAGED BIRDS.

The best Pills for all complaints, give every satisfaction, command a large and  
increasing sale. Don't fail to stock Excelsior Poultry Pills if you want a good sell-  
ing line. Neatly got up to Retail in Boxes 2d. and 6d. each. Wholesale price—  
Case of 18 2d. Boxes, 2/; 1 Gross, 15/. Case of 2 Dozen 6d. Boxes, 7/; 1 Gross of 6d.  
Boxes, 40/. Carriage Paid on not less than 4/5 per cent. off 20/; 15 per cent. off 40/.  
Cash with Order. Show and Counter Bills supplied. [1]**W. H. LAKIN, Manufacturer, 16 New Bond St., LEICESTER****LEARNER'S****PATENT FOOT-ROT COMPOSITION.****A CERTAIN CURE.**£1,000 was bond-fidely offered for this Patent in December, 1890. This proves  
the value of Learner's Foot-rot Composition above all others.

Retail in two sizes, 1s. 6d. and 3s. Prices to the Trade, 13s. and 26s. per doz.

May be obtained of the Proprietor or of most London Houses.

**PRECIPITATED CHALK, WHITEST AND PUREST**CHEAPEST SELLERS IN THE MARKET.  
ALSO CHEMICALS, DRUGS AND OILS.

APPLY TO

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PREPARATIONS and INSTRUMENTS

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**MARX'S****INDELIBLE MARKING INK**

NO HEAT REQUIRED.

May be obtained direct from the Makers—

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This Marking Ink is the Best Ink introduced to the Trade, and is sold Retail  
6d. and 1/- per bottle; also 1/6, 2/6, 3/6, 5/-, 7/6, and 10/6.

Also CRIMSON MARKING INK at the above prices. Send for Sample Order

**"SILVERY WHITE GUTTA PERCHA ENAMEL,  
TOOTH STOPPING.**

TRADE MARK.



Registered—No. 3745.

P. A. STEVENS, Surgeon-Dentist

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Special Terms to Wholesale Houses for Sheet or Sticks stamped with their own name.  
A sample box of 3d. sticks sent post free for 12 stamps. Price list and samples free.**INDIARUBBER STAMPS**

For all purposes and in all styles.

Self-Inking Stamps, as Illustration, from 2/ each.

Chemists' Prescription and Dating Stamps

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Sole Proprietors of Sanford's Celebrated RAT POISON, with-  
out doubt the best ever introduced. Price, 6d., 1s., 2s., and 3s. per box.Also MICE POISON; cannot be excelled. In packets, 3d., 6d., and  
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FINEST PALE LIVER

**BARBADOES ALOES.**

Buyers are invited to apply for prices to

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ST. MARY'S CHAMBERS, ST. MARY AXE, LONDON,

The Largest Holder in England. [2]



ALOE

**BARTON'S EXTERMINATOR.**

ONE SHILLING PER BOX.

Kills and Completely Dries up Rats and  
Mice. Does Not Harm Dogs or Cats.  
No Smell from the Dead Ones.**WOLSTENCROFT & CO., 28 LUDGATE HILL, E.C.**  
THROUGH ALL THE WHOLESALE HOUSES.